COLLEGE OF MANAGEMENT SCIENCES
Michael Okpara University of Agriculture
Umudike, Abia State Nigeria

INTERNATIONAL CONFERENCE

theme

ADVANCING ENDOGENOUS AFRICAN BUSINESS: ENTREPRENEURSHIP, INNOVATION AND SUSTAINABILITY

Special Feature:
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PROCEEDINGS

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Michael Okpara University of Agriculture,
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"ADVANCING ENDOGENOUS AFRICAN BUSINESS: ENTREPRENEURSHIP, INNOVATION AND SUSTAINABILITY"

PROCEEDINGS

of Maiden International Conference of College of Management Sciences, held 25-28 October 2023, at Pius Anyim Auditorium, Michael Okpara University of Agriculture, Umudike, Abia State Nigeria.

EDITORS

Oteh, O.U., Ani, W.U. Osuala, A. E., Onyike, S.C., Onyemachi, OND. & Ujah, P.

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Protocols/Salutations

Today marks a milestone in this University's annals and the COLMAS's history as they host this maiden international conference. COLMAS has come a long way despite all odds. When the Dean and his team intimated to me this project, I had some reservations given that there may not be a handful of participants in the face of a few departments that currently have students in the college.

Alas! The courage and consistency of purpose of the Dean, his HODs, and the LOC defeated every doubt, hence this unique meeting.

Today, I am pleased that this University is agog with the cream de la cream of both members of the political and academic circles. I am much more elated by the esteemed presence of the Executive Governor of our dear State, Abia (represented by the Senior Special Assistant on Agriculture, one of our own, Dr. Agbaeze), and his entourage.

The Governor has shown unreserved interest and love for our University since the inauguration of his tenure on May 29, 2023.

More so, for the COLMAS in particular, the Governor has appointed some of our academic staff as members of his executive council.

The theme of this conference: "Advancing Endogenous African Business: Entrepreneurship, Innovation, and Sustainability," is apt as it captures the leadership mantra of the Governor, a development expert and strategist with a strong passion for giving a new development roadmap for our dear State and the country at large.

I appreciate the esteemed presence of the VC, ABSU, and the Keynote.

Speakers and the lead paper presenters, as well as members of the business community and captains of industries, are present. I wish you all a pleasant feel of the serene atmosphere of great Umudyke as you savor the intellectual dishes that this conference is billed to offer you and which shall embellish the various entrepreneurial development agenda of our time in the wake of the clarion call for a paradigm shift; to diversify interest beyond the oil economy.

I hope the various resource persons drawn across the globe will do justice to this trending topic: "Advancing Endogenous African Business: Entrepreneurship, Innovation and Sustainability." On the strength of this, I warmly declare this conference OPEN.

Keynote Address I

BUILDING A SUSTAINABLE FUTURE FOR AFRICAN BUSINESS: THE ROLE OF ENTREPRENEURSHIP AND INNOVATION

Dr. Uchechukwu Sampson Ogah, FCA, OFR,
President/Founder, Masters Energy Group

INTRODUCTION

It is an immense honor to join you today at the inaugural College of Management Sciences International Conference 2023 in this great Michael Okpara University of Agriculture, Umudike. I commend the visionary leadership of this institution's College of Management Sciences for convening this gathering of minds dedicated to the critical Conference theme of "Advancing Endogenous African Business: Entrepreneurship, Innovation and Sustainability." From the Conference theme, I have derived my keynote speech topic, "Building a Sustainable Future for African Business: The Role of Entrepreneurship and Innovation."

By the chosen topic, I will delve into the pivotal role that entrepreneurship and innovation play in shaping the indigenous African business landscape and paving the way for a prosperous, sustainable future. In a continent brimming with untapped potential and rich in talent, the impetus lies on us, the entrepreneurs, innovators, and intellectuals, to seize the opportunities that abound.

Let me confess that my journey as an entrepreneur in Nigeria has been deeply entwined with the theme of this Conference. It is a journey marked by audacity, adaptability, and a relentless pursuit of innovation. Through both triumphs and trials, I have understood that it is not merely about business success but about contributing to a more sustainable, thriving African economy and fostering shared prosperity.

So, I stand before you this day not only as an entrepreneur but as a reflection of the transformative potential within each of us. My acceptance of the invitation to deliver this keynote is to share knowledge garnered from experience that could inspire our future leaders of African business with the insights and strategies necessary to navigate the complex terrain of entrepreneurship and innovation. With this motivation in mind, let us embark on a voyage of discovery, learning, and collaboration.

Overview of Endogenous African Business Terrain

With its immense potential and diverse resources, Africa stands at a critical juncture in its economic journey. The continent is home to a youthful and dynamic population, one of its greatest strengths. With over 1.3 billion people, Africa's demographic dividend presents a tremendous economic growth and development opportunity.

However, it is imperative to acknowledge the challenges that persist. Infrastructure deficits, bureaucratic hurdles, and limited access to financing are among the foremost obstacles facing African businesses. According to recent data, over 600 million Africans lack access to reliable electricity, hindering the potential of various industries. The World Bank's Ease of Doing Business Index also highlights that African countries still face significant regulatory challenges.

Yet, amidst these challenges, we see a thriving entrepreneurial spirit across the continent. Small and medium-sized enterprises (SMEs) constitute the backbone of many African economies, accounting for a substantial share of employment and economic activity. These enterprises demonstrate resilience and adaptability, which are hallmarks of African entrepreneurship.

Moreover, the digital revolution is transforming the business landscape in Africa. The proliferation of mobile technology has given rise to a new wave of tech-savvy entrepreneurs leveraging innovation to address longstanding challenges. The Fintech sector in Africa has been growing astonishingly, with startups revolutionizing access to financial services for millions of people.

Let us take a moment to reflect on some statistics that underscore the potential and progress we are witnessing in African business terrain:

- The African Continental Free Trade Area (AfCFTA), launched in 2021, is creating the largest free trade zone in the world, with the potential to boost intra-African trade by over 50%.

- The World Bank reports that Sub-Saharan Africa boasts some of the highest rates of entrepreneurship in the world, with over 80% of employment in the region generated by SMEs.
- According to the African Development Bank, Africa's middle class is projected to grow to over 1.1 billion by 2060, creating a burgeoning consumer market with vast opportunities for African businesses.

In light of these developments, it is evident that entrepreneurship and innovation are pivotal in shaping the future of endogenous African business. By harnessing the power of innovation, we can address the challenges that persist and unlock new avenues for sustainable growth.

As we move forward, African businesses can collaborate across borders and sectors, leveraging Africa's wealth of talent, creativity, and resources. By so doing, African entrepreneurs can build a sustainable future where African businesses thrive, contributing to economic prosperity, the well-being of communities, and the preservation of our planet.

The Factor of Sustainability in Building African Business

First, let us address the imperative of sustainability in building indigenous African enterprises. Generally speaking, sustainability entails building something that stands the test of time and positively impacts the environment and humanity. In the context of African business, sustainability means not only achieving economic growth but doing so in a way that preserves and enhances our environment, society, and culture for future generations. It means operating businesses to minimize negative impacts on the environment while uplifting communities and promoting inclusive growth.

Why is sustainability crucial for the future of African economies? The answer lies in the unique challenges and opportunities that our continent faces. Africa has abundant natural resources, diverse cultures, and a youthful population eager to drive progress. However, it is also vulnerable to climate change, resource scarcity, political instability, and socioeconomic inequalities. To secure a prosperous future, we must embrace sustainability as a guiding principle in all our enterprising endeavors.

Now, there are some inspiring examples of successful sustainable businesses right here in Africa. One shining example is M-Pesa, which revolutionized mobile banking and financial inclusion. M-Pesa is a mobile phone-based money transfer service, payments, and micro-financing service based in Kenya but also operating in South Africa, Tanzania, Mozambique, Ghana, Egypt, Lesotho, the Democratic Republic of Congo, and even Afghanistan. This innovation empowers millions of Africans with access to financial services. It reduces the need for physical infrastructure, thus minimizing the environmental impact.

Like Kenya's M-Pesa is Nigeria's Flutterwave, a safe and reliable online payment gateway for Africa that has gained global acceptance, Flutterwave's mission has been to help businesses overcome challenges surrounding access to financial services and connecting them to the global stage. It enables multiple payment modes, including local and international cards, mobile wallets, and bank transfers. While specific environmental initiatives may not be a primary focus of Flutterwave, their contribution to the digitization of financial transactions indirectly reduces the environmental impact associated with traditional paper-based transactions, thus making Flutterwave a sustainable business.

Another remarkable sustainability-driven business case is Solar Sister. This innovative social enterprise has brought clean, affordable energy solutions to off-grid communities. Solar Sister started in Uganda and has spread to some other African countries. By harnessing the power of renewable energy, Solar Sister addresses energy poverty. She reduces reliance on fossil fuels, contributing to a cleaner, more sustainable future.

Furthermore, we have companies like Ethiopia's SoleRebels, a footwear company that combines traditional craftsmanship with sustainable materials. This enterprise provides employment opportunities and champions ethical production practices, setting a standard for responsible business operations.

These few examples show us that sustainability is not a mere ideal but a tangible and achievable goal that should be integral to building an endogenous African business for the future. They remind us that innovation and entrepreneurship can be powerful catalysts for positive change.

As African enterprises forge ahead, their economies must foster an ecosystem that supports and encourages sustainable entrepreneurship. This includes creating policies that incentivize environmentally friendly practices, investing in education and training for our youth, and providing access to capital for budding entrepreneurs with innovative and sustainable ideas.

Embracing sustainability as the cornerstone of African business is not a choice but a compelling imperative for enduring global competitiveness. We can shape a future where economic prosperity coexists harmoniously with a thriving environment and empowered communities. Through innovation,

entrepreneurship, and a steadfast commitment to sustainability, we can build a legacy of prosperity that will resonate through generations.

The Role of Entrepreneurship in Building Sustainable African Business

Ladies and Gentlemen, let's now delve into the pivotal role of entrepreneurship in sustainable business and how it holds the key to unlocking Africa's economic potential.

Entrepreneurship is the engine that propels economic growth. It is the catalyst for innovation, driving the creation of new products, services, and business models that meet the needs of our rapidly evolving society. By fostering a culture of entrepreneurship, we generate wealth and foster resilience, adaptability, and a spirit of problem-solving that is essential for sustainable development.

The stories of a few remarkable African entrepreneurial concerns like M-Pesa, Flutterwave, Solar Sisters, and SoleRebels that I mentioned reflect the growing abundance of endogenous African entrepreneurship that has harnessed our creativity and drive for positive change. These stories exemplify how entrepreneurship goes beyond profit-making; it creates positive and lasting impacts on communities and the environment.

Moreover, entrepreneurship is a powerful driver of job creation and poverty alleviation. It empowers individuals to take charge of their destinies, providing them with the means to support themselves and their families. By fostering an ecosystem that supports startups and small businesses, we can harness the potential of entrepreneurship to lift people out of poverty and foster economic inclusivity.

As we gather here today, let us be inspired by these examples and commit to nurturing a culture of entrepreneurship that drives sustainable business in Africa. This requires us to invest in education, mentorship programs, and access to capital for aspiring entrepreneurs. It also calls for the government to facilitate the creation of supportive policy frameworks that encourage innovation, responsible business practices, and environmentally conscious solutions. Yes, entrepreneurship is not merely a means of generating profit but a force for good that can transform African societies, create opportunities, and drive sustainable economic growth. By championing and supporting our entrepreneurs, we are investing in Africa's future prosperity and well-being.

The Innovation Matrix as Catalyst of Sustainable African Business

Ladies and gentlemen, another critical aspect of building a sustainable future for African business is fostering innovation. Through innovation, we unlock our continent's true potential, harnessing its diverse resources, talents, and untapped opportunities.

Innovation lies at the heart of business sustainability. It is the driving force that propels us beyond the boundaries of the familiar into realms of creativity, adaptability, and progress. In African business, innovation isn't just a luxury but a necessity. It is our ticket to overcoming unique challenges and creating solutions that resonate with our communities.

When we speak of African challenges, we acknowledge that they are as varied as our landscapes. Our continent grapples with distinctive obstacles, from access to quality education and healthcare to sustainable agriculture and clean energy. But let me assure you, these challenges are not insurmountable barriers; they are opportunities waiting to be seized.

Indeed, for a long time, the place of innovation in Africa's economies and enterprises needs to be addressed in academic and policy discourses. This resulted from a rather wrong impression promoted by indices such as the Global Innovation Index, in which most African countries can be found at the lower end of the ranking. Today, however, we can confirm that African economies have always been sources of creativity and innovation.

Innovation is our compass guiding us through uncharted territory. It is the beacon of hope that transforms adversity into advantage. For instance, innovative entrepreneurs in many African economies have smartly adopted new developments in ICT. According to World Development Indicators, in 2014, the ICT sector contributed more than 10 percent to the gross domestic product (GDP) in countries like Kenya, Nigeria, South Africa, Tunisia, Senegal, and Morocco. The impact of ICT has continued to be phenomenal ever since. In Nigeria alone, the sustained growth of ICT pushed the Gross Domestic Product contribution to N12.32tn in 2022, according to a report by The PUNCH newspaper.

So, with the quantum leaps of innovation in mobile technology across Africa, we have seen how mobile banking platforms have revolutionized financial inclusion, reaching communities that were once

marginalized. This is innovation at its finest, bridging gaps and changing lives. In agriculture, we witness the power of agricultural tech startups that employ cutting-edge techniques to optimize crop yields, conserve water, and promote sustainable farming practices. These initiatives ensure food security and protect the environment for generations to come.
Also, consider the renewable energy sector, where African entrepreneurs harness the continent's vast solar potential, providing clean, affordable energy to millions. These initiatives combat energy poverty and contribute to global efforts to combat climate change. One shining example is the Solar Sister enterprise that I referenced earlier. It is a testament to the transformative power of indigenous innovation that abounds across Africa today.

However, to foster innovation, we must cultivate an ecosystem that nurtures creativity, collaboration, and risk-taking. This requires investment in education, research, and development. It means supporting startups and entrepreneurs, enabling them to experiment, iterate, and ultimately scale their solutions. Fostering innovation is not just a choice; it is our imperative. It is the key that unlocks the door to a sustainable future for African business. Let us embrace our challenges not as obstacles but as opportunities to innovate, pioneer, and lead.

Collaborative Partnerships in Building Sustainable African Business

My distinguished audience, although entrepreneurship and innovation are integral dynamics in building a sustainable African business, we must recognize the critical role of collaborative efforts through public-private partnerships.
In the journey toward sustainable business development, we must recognize and harness the collective power of government, the private sector, and academia. Together, these entities form the cornerstone of a thriving economic ecosystem, and it is through their collaborative endeavors, we can truly and maximally unlock Africa's endogenous business potential.
Now, public-private partnerships serve as a powerful catalyst for progress. They bring together the expertise, resources, and networks of both the public and private sectors, amplifying the impact of initiatives to drive sustainable growth.
Take, for example, the partnership between the Rwandan government and Volkswagen. This collaboration established a state-of-the-art automobile assembly plant, bolstering Rwanda's automotive industry, creating jobs, and fostering skills development within the local workforce.
Similarly, the collaboration between the African Development Bank and various private sector players has facilitated the creation of initiatives like the Africa Investment Forum. This platform mobilizes investment for critical projects across the continent and showcases Africa's immense potential for investors worldwide.
However, to truly unlock the full potential of public-private partnerships, we must nurture an environment that encourages trust, transparency, and shared objectives. This begins with open communication and a mutual understanding of each party’s strengths, challenges, and aspirations.
Furthermore, we must establish clear frameworks and governance structures that provide a solid foundation for collaboration. These frameworks should define roles, responsibilities, and accountability mechanisms to ensure that partnerships are effective, sustainable, and aligned with overarching goals.
Education and research institutions also play a pivotal role in this collaborative effort. By fostering innovation and knowledge-sharing, academia can bridge government policies and private sector implementation. Universities and research centers can provide the expertise and intellectual capital to drive innovation and inform decision-making.
In addition, let us remember the critical role of inclusivity in these partnerships. We must ensure that all segments of society feel the benefits of collaborative efforts, including marginalized communities and SMEs.
In other words, the path to a sustainable future for African businesses lies in our collective ability to collaborate. Through the synergy of government, private sector, and academia, we can create a vibrant and resilient business landscape.

Talent and Skills Development as Drivers of Sustainable African Business

Again, one of the fundamental pillars in achieving the vision of building a resilient indigenous African business is nurturing talent and developing crucial skills. In the business landscape, a skilled workforce forms the bedrock upon which sustainable enterprises are built. It is the linchpin that propels innovation, fosters competitiveness, and ultimately ensures long-term success. In Africa, we are blessed with abundant

untapped potential to be harnessed. Our responsibility lies in providing the tools and opportunities for this potential to flourish.
To this end, various initiatives and programs have been set in motion across the continent. These initiatives range from vocational training centers in urban areas to community-based education initiatives in rural regions. By investing in these platforms, we are not only imparting knowledge and skills but also nurturing a sense of empowerment and self-reliance within our communities.
One such notable initiative is the establishment of partnerships between our educational institutions and industry leaders. These collaborations bridge the gap between theoretical knowledge and practical application, ensuring that our students are equipped with the relevant skills demanded by the job market. Moreover, mentorship programs offer invaluable guidance and exposure to real-world challenges, enabling our youth to adapt and thrive in a dynamic business environment.
However, to further enhance educational and vocational training opportunities, we must collectively focus on three key recommendations:

Curriculum Innovation: Our educational curricula must evolve to reflect the rapidly changing demands of the global market. We need to incorporate emerging technologies, sustainability practices, and cross-disciplinary learning. By doing so, we prepare our workforce not just for today but for the challenges and opportunities of tomorrow.
Public-Private Partnerships: As discussed earlier, collaboration between governments, private enterprises, and educational institutions is paramount. By pooling resources and expertise, we can develop tailored programs, provide state-of-the-art facilities, and offer financial support to deserving students. This synergy creates a holistic ecosystem where talent can thrive.
Access and Inclusivity: We must ensure that quality education and training are accessible to all, regardless of socioeconomic background or geographical location. This entails leveraging digital platforms for e-learning, establishing community learning centers, and offering scholarships to deserving candidates.
Thus, nurturing talent and skill development is not merely an investment in human capital; it is an investment in our collective future where we have the power to shape a vibrant and sustainable African business landscape that not only competes on the global stage but also addresses the unique challenges facing our continent.

Case Studies and Success Stories

Ladies and gentlemen, let us focus on some remarkable case studies and success stories that exemplify the power of entrepreneurship and innovation in driving sustainability within African businesses, particularly in the Nigerian context. There are, of course, many successful examples.
One contemporary example is the story of **Green Village Electricity**. This company provides affordable solar power to off-grid communities in Nigeria. The company has installed over 10,000 solar panels in over 200 communities, serving over 100,000 people. Green Village Electricity is also helping to create jobs and reduce greenhouse gas emissions. By leveraging cutting-edge technology and a keen understanding of local needs, they have reduced environmental impact and spurred economic growth through job creation. Their success teaches us that by identifying pressing issues within our communities and applying ingenuity, we can create solutions that benefit both the environment and the economy.
The story of **Farm To Table** Nigeria serves as a compelling illustration of agricultural sustainability. Based in Kano, this enterprise has implemented eco-friendly farming practices and established direct-to-consumer supply chains, reducing food waste and ensuring fair compensation for local farmers. Their journey emphasizes the importance of adopting sustainable practices in our agricultural sector for environmental preservation, economic stability, and food security.
We also have a Nigerian company called **Waste for Wealth**. This company collects and recycles waste to produce organic fertilizer and other products. Waste for wealth has helped to reduce pollution and create jobs in Nigeria. The company has also been able to sell its products to farmers and other businesses, generating significant revenue.
Other successful case studies include the following endogenous Nigerian businesses making a difference. **ColdHubs**: This Company provides solar-powered cold storage units to farmers in Nigeria. ColdHubs helps farmers to reduce post-harvest losses and increase their incomes. The company has also helped to create jobs in the agricultural sector. **Lifebank**: This Company is a social enterprise that provides blood transfusions to people in need in Nigeria. Lifebank has helped to save thousands of lives and has also helped to create jobs in the healthcare sector. **Farmcrowdy**: This Company is a digital platform that

connects farmers with investors. Farmcrowdy has helped farmers raise over N10 billion in funding and has also helped to create jobs in the agricultural sector.

Paystack: This Company is a fintech company that provides payment processing services to businesses in Nigeria. Paystack has helped businesses scale up and create jobs in the financial sector. **Andela**: This Company is a tech training company that trains African software developers. Andela has helped create jobs in the tech sector and boost the Nigerian economy.

Of course, I must not fail to cite the example of **the Masters Energy Group** I founded. Masters Energy was incorporated in Nigeria in 2005 to operate fully in the oil and gas sector. Since then, the company has expanded and diversified to assume leading positions in the oil and gas sector and in power, EPC, petrochemicals, aviation, shipping, and marine businesses. As a highly innovative indigenous African company, desirous to create superior value for society and stakeholders, the company continues to break new ground and attain greater heights. Starting Masters Energy was not easy for me. There were challenges like financing, but through resilience and leveraging a sound management system, innovation, and technology, Masters Energy has attained many milestones and record-setting achievements that time and space will not permit me to enumerate.

We remain a leading Nigerian content player, prioritizing the employment of Nigerians from various backgrounds. Our priority is also given to goods and services produced locally in the country. Our positive impact on community issues and the environment is well articulated and executed as part of our corporate social responsibility policy.

My esteemed listeners, from these few remarkable cases of successful endogenous African businesses that are on the path of sustainability through entrepreneurship and innovation, we can glean some key takeaways and lessons:

One, Local Context Matters: Each exemplary enterprise began by identifying specific challenges within its local context. This underscores the importance of intimately understanding the needs and nuances of the communities we serve.

Two, Technology as an Enabler: Embracing technology and innovation was pivotal in achieving sustainability goals. It allowed these businesses to scale their impact, reach wider audiences, and operate efficiently.

Three, Collaboration and Adaptability: Each success story involved collaboration with various stakeholders - from government bodies to local communities. Flexibility and adaptability were crucial in navigating regulatory landscapes and responding to evolving market demands.

Four, Long-term Vision and Commitment: Sustainability is not a short-term endeavor; it requires dedication and perseverance. The businesses we have mentioned today demonstrated a steadfast commitment to their mission, even in the face of challenges.

The Way Forward for Building Sustainable African Business

Ladies and gentlemen, as we chart a course towards a sustainable future for African business, it is crucial to outline actionable strategies to foster entrepreneurship and innovation across the continent. Equally important is the role that policy-makers, educators, and industry leaders play in driving this transformative agenda.

In fostering Entrepreneurship and Innovation, the following are critical:

a. Access to Funding: One of the primary challenges budding entrepreneurs face is access to capital. Encouraging the establishment of venture capital firms and angel investor networks and supporting crowdfunding platforms can provide the financial fuel needed to kickstart innovative ventures.

b. Incubators and Accelerators: Establishing and expanding business incubators and accelerators can provide invaluable support to startups. These programs offer mentorship, networking opportunities, and access to resources that can significantly increase the likelihood of success.

c. Encouraging Research and Development: Investing in research and development is paramount for driving innovation. Governments can incentivize businesses to allocate resources towards R&D through tax breaks and grants, creating an environment where experimentation and creativity thrive.

d. Promoting a Culture of Risk-Taking: Embracing failure as a learning opportunity is fundamental to fostering a culture of innovation. Educational institutions and industry associations can be crucial in instilling an entrepreneurial mindset from an early age.

Concerning the Role of Policy-Makers, Educators, and Industry Leaders, the following are imperative:

a. Policy and Regulatory Frameworks: Governments must enact policies that promote an enabling environment for business growth. This includes creating clear and transparent regulatory frameworks, protecting intellectual property rights, and offering incentives for sustainable practices.

b. Education and Training: Educational institutions are pivotal in equipping the next generation with the skills and knowledge necessary for the modern workforce. Curriculum reforms prioritizing critical thinking, problem-solving, and digital literacy are essential.

c. Public-Private Partnerships: As earlier mentioned, collaboration between the public and private sectors is a linchpin in driving sustainable growth. Governments, industry leaders, and educational institutions must work hand-in-hand to identify and address challenges and seize opportunities for innovation.

d. Advocacy and Knowledge Sharing: Industry associations and business leaders can lead the charge in advocating for sustainable practices. Sharing best practices, organizing forums for knowledge exchange, and mentoring emerging entrepreneurs are ways in which industry leaders can contribute.

CONCLUSION

My dear distinguished audience, building a sustainable future for African businesses requires a collective effort, with each stakeholder playing a unique and vital role. By fostering entrepreneurship and innovation and embracing policies and initiatives supporting these endeavors, we pave the way for a brighter, more prosperous continent.

Today, we have explored the pivotal role of entrepreneurship and innovation in sculpting a sustainable future for African businesses. We have witnessed the potential for transformative change that lies within the hearts and minds of entrepreneurs across this diverse continent. And we have seen the power of innovative thinking and the indomitable spirit that drives progress.

It is imperative to repeat that entrepreneurship, innovation, and sustainability are not mere buzzwords but the cornerstones of a prosperous and enduring future for African business. They are the catalysts to drive economic growth, create jobs, and foster inclusive development.

Now, more than ever, I implore each of us to take proactive steps within our spheres of influence. Let us champion sustainable practices, foster a culture of innovation, and embrace the challenges of building a better, more resilient business landscape. Let us collaborate across industries, borders, and disciplines. Let us learn from one another, sharing our knowledge, resources, and experiences.

I want to extend my sincere gratitude to everyone for your time today. Your presence and patience speak volumes about your commitment to this cause of this Conference. I also express my profound appreciation to the organizers of this Conference for providing this invaluable platform. This kind of conversation has no end. It will continue in diverse forums till African businesses fulfill their potential. And hopefully, we will get there.

Keynote Address II

ADVANCING ENDOGENOUS AFRICAN BUSINESSES THROUGH ENTREPRENEURSHIP

Distinguished Senator Wabara, Adolphus N., Ph.D.
Former Senate President, Federal Republic of Nigeria

INTRODUCTION

With each new day in Africa, a gazelle wakes up knowing it must outrun the fastest lion or perish. At the same time, a lion stirs and stretches, knowing it must outrun the fastest gazelle or starve. It's no different for the human race. Whether you consider yourself a gazelle or a lion, you have to run faster than others to survive. That is the world of Endogenous African businesses.

In the words of ***AlikoDangote:*** To build a successful business, you must start small and dream big. In the journey of entrepreneurship, tenacity of purpose is supreme".

Since mother Africa itself gave birth to humanity, the first business must have emerged in Africa. Thus, entrepreneurship has always existed in Africa. On this continent, the first entrepreneurs were farmers, ranchers, traders(often itinerant), artisans, themselves divided into castes *i.e* blacksmiths, weavers, etc. Some very early businesses therefore must have taken the form of people trading in meat and skins from their hunting trips.

Endogenous African businesses are businesses that integrate relatively unique natural resources with modern business knowledge and skills in economic activity that involves the exchange, purchase, sale or production of goods and services with a motive to satisfy customers' needs while maximizing profit.Business knowledge is one of the knowledge-types that is now becoming more available, including all its subdisciplines, such as Management, Marketing and Finance, which speaks volume of our College: College of Management Sciences where these courses are offered.

Endogenous African businesses aimed to create and sustain competitive advantage by integrating Africa's endogenous natural resource advantages and the economic, social and cultural systems that build on them with modern business practices.

According to Schumpeter (1934), entrepreneurship is a driving force of innovation, and more generally an engine for economic development. Therefore, entrepreneurship represents the missing link between investment in new knowledge and economic development, serving as a conduit for both entirely new knowledge and knowledge spillovers.

When Sam Okoroafo (2000) started the Journal of African Business, he stated that "Africa … has not yet reached its potential in business. Thus, it continues to remain an untapped frontier despite an abundance of resources, wildlife, natural beauty, and climate." Twenty years later, business in Africa is probably more active than ever.

Why do we need to advance endogenous African businesses through entrepreneurship? First, because endogenous African businesses typically make use of African resources related to African geography and culture, they are deeply engrained in African systems, and contribute to the development of African economies.

The endogenous firms can create alternative models for more sustainable economies. Because their resources are unique and difficult to imitate, they can create and sustain competitive advantages. The natural resources upon which they build their competitiveness may be valued more and thus receive more preservation against overuse and depletion. As such, they contribute to a more refined, diversified and stable economy.

Second, endogenous firms strengthen ties with wealth creation and they create new employment opportunities in the often depopulating rural areas. Third, they contribute to food security because they may make traditional diets available and attractive to the growing urban populations. They also make rural areas more vibrant, thus strengthening food production in general.

Fourthly, once such firms become significant contributors to local and national economies, they can put pressure on administrators to create supportive business environments that will further foster growth.

Fifthly, endogenous firms reward creative entrepreneurs, and they are potentially genderneutral. Finally, endogenous firms are firms to be proud of because they prove to new generations that not everything from abroad is better…

What is so special about the African continent that affects business development? The current dynamism of the informal sector shows that there is a pool of potential entrepreneurs. But at a time when we are talking about value addition, innovation, automation and digitalisation, a large part of entrepreneurship in Africa is more a matter of entrepreneurship out of necessity or out of spite, which obeys more rules of survival.

Onugu (2005) asserts that a number of issues facing endogenous African businesses which make them to perform poorly, and in some cases even fail includes: Poor infrastructure, corruption, lack of managerial and entrepreneurial skills, difficulties with financing, a lack of demand for their goods and services, a limited capacity for research and development as well as innovation, an inadequate technology system, the burden of multiple taxes, the absence of a business plan or a good business plan, and the hiring of incompetent employees.

Oluboba (2011) contends that the problems faced by endogenous African businesses cannot be overstated and are a result of poor access to capital, management practices, low stakeholder equity participation, inadequate infrastructure, societal and attitude issues, a lack of skilled labour, the proliferation of regulatory agencies, limited access to markets, and a lack of information access.

CONCLUSION

I want to conclude with the words of ***Chris Kirubi*** **of** ***Kenya:*** "In the words of Business there is always a struggle. There are always obstacles and competitors. There is never an open road, except the wide road that leads to failure. Every great success has always been achieved by fight, every winner has scars. The men who succeed are the efficient few --they are the few who have the ambition and will-power to develop themselves. So choose to be among the few today."

However, I call on African Governments, Non-Governmental Organisations and Foreign Partners to help in creating a conducive environment that will enable endogenous African businesses to strive and succeed as the success of endogenous African businesses portends unlimited benefits to the African continent and the world at large. African Governments need to unlock the obstacles that African entrepreneurs face, so that entrepreneurs, rather than aid agencies or governments will spur the continent's transformation to the pride and glory of Africa.

My advice to emerging entrepreneurs is the word of Michael Jordaan, a South African businessman and founder of MonteGray Capital: "Businesses that are spoilt with too much capital make the wrong decisions. Constraints are the most wonderful things in business, because constraints allow you to be innovative and come up with different solutions."

Therefore, focus on making your products or services awesome, the money will follow!

RECOMMENDATIONS

Universities and higher institutions have their roles to play in advancing endogenous businesses. Recognizing the uniqueness of African businesses also has consequences for what we teach African business students. I suggest that students should learn theories and read cases to which they can relate and perhaps be proud of. Just think of the millions of African children who aim to follow the footsteps of professional African football players in the big competitions in Europe. If only a small percentage of their time and energy is channeled toward following role models in successful endogenous African businesses like; ***AlikoDangote, Innocent Chukuwma of Innoson Motors, Dr. Cletus Madubugwu Ibeto of Ibeto Cements, Chief Allen Onyema of Air Peace, and so on.*** Africa may be at the dawn of a bright future.

Endogenous African Business Entrepreneurs need to mobilize endogenous resources to a greater extent, giving priority to subsistence agriculture, eliminating the illicit capital flight, integrating aspects of the informal economy into development, etc. Above all, if the model of development in Africa is to be reinvented, existing natural resources must be protected at once and a radical change must be made in the way these resources are exploited, in the production systems and in the models of consumption.

Africa's Agricultural and Agri-food potentials should be put to full and judicious use. This sector has the advantage of contributing to decentralised economic development and involving both small farmers' networks and small- and medium-scale companies and industries. It is also a choice field for exploring balanced partnerships between agricultural producers, networks of small- and medium-scale African companies and industries and multinational companies.

Lastly, Endogenous African Business Entrepreneurs need to improve their Managerial skills acquisition in order to improve employees' dedication which will enable growth, while efficiently delivering outstanding results.

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LEAD PAPER

ENDOGENOUS AFRICAN BUSINESSES: EMERGENCE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)

Professor Okereke, Emeka J.
Director, University Of Port Harcourt Business School

PROTOCOLS & GREETINGS…

I am very pleased to be here today as one of the Lead Presenters.
The theme of this conference is apt and timely considering the present focus on how African countries can look inwards, exploit and maximize its endowed resources by itself for itself and beyond.
It is my fervent believe that with **effective and efficient strategies**, the challenges faced by African countries in this regard would be **surmounted.**

INTRODUCTION…

- African continent is going through a historic change for better ***like never before***, with greater awakening in every area including approach to doing business.
- The consciousness of African way of doing things has given rise to the concept of **Endogenous African Business.**
- This concept hinges on the identification and exploration of Africa's huge natural and mineral resources that have been highly exploited by the western world.
- The current language and bold moves of most African leaders show

brazen decision to take their destiny in their own hands by ensuring that there sources endowed in their territory are managed by the state as against the old order of the colonial masters allocating endogenous resources and deciding what goes to the owner country.

- **What a misnomer and disaster indeed! Exploitation taken too far!**
- The Theme of this conference is also a pointer to the sensitivity and sensibility of academic community to drive sustainably the African economies from the inside using not only available human, material and natural resources but also innovative ideas and entrepreneurships kills.
- **This is doing business in Africa endogenously.**

ENDOGENOUS AFRICAN BUSINESSES: EMERGENCE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)

- African endogenous businesses are those businesses that depend wholly on the endowed resources and systems in Africa given birth to entrepreneurs operating Micro, Small and Medium Enterprises (MSMEs) and by extension Large Enterprises.
- ***Given that concentration of African Endogenous businesses is on MSMEs, we are laying emphasis on them in this paper.***
- Essentially, MSMEs and by extension Endogenous African Businesses are very important because they have the capacity and potential to drive economic development and growth, revitalize remote and rural areas, contribute to food security and healthy diets, and provide role models of which Africans can be proud.
- Hence, these businesses deserve our attention in the next two decades of scholarly research and education on African businesses.

A BIT OF THEORY!

- African endogenous business is driven by the Endogenous Growth Theory
- This builds on the fact that economic growth of any economy is function of factors internal to that economy other than external factors.
- Thus, the level of human capital development of a country, which creates improved knowledge acquisition, creativity and innovation, among others, determines the level of productivity and general outlook of that economy.
- Continuous improvement in the knowledge base of a continent like Africa is very KEY to

Enhanced Human Capital and by extension Improved Creativity and Innovation, which snowballs into Advanced Africa Endogenous Businesses.

- Entrepreneurship and Innovation provide the needed gaps in advancing African Endogenous Businesses.
- **A close look at these concepts is apt at this juncture.**

ENTREPRENEURSHIP AND INNOVATION

Entrepreneurship and Innovation cannot be separated. They are functionally intertwined. Innovation is the forerunner of entrepreneurship, which is an entrepreneur's creative process content.

Entrepreneurship is the art and science of creating economic value, among other values. It is the ability to disrupt an existing market and/or product/service with a strong view of adding value(s).

The realization of these contributions is a function of how innovative entrepreneurship is. The more innovative entrepreneurship is the more new acceptable ideas, products/services and the more profit is generated with more goals accomplished at all levels including largely economic growth and development.

All these call for entrepreneurship programmes that will promote idea generation, screening, feasibility and implementation; ignite and bring out the entrepreneurial spirit. And launch them out as Disrupters, Facilitators of Change.

INNOVATION AND CREATIVITY

- Innovation is likened to creativity and is often used interchangeably.
- This is because they are in the same business of *newness* but are different because while the latter is *thinking*, the former is *doing*.
- Both the *thinking* and the *doing* are all towards same goal of *New Thing*: Product or Service.
- Thus innovation can come as a complete new thing. This is called invention.
- There is also the combination of simpler parts, concepts, into a new product inside an existing product or service. A good example is a version of Techno Phone with Selfy, Video call and other facilities.
- Entrepreneurs with innovative ideas that are diligently and resourcefully explored grow very fast in businesses from Startups or Micro-enterprises to Small and Medium (MSMEs) and Large enterprises.
- The major criteria for defining these categories of enterprises are the number of employees, among others. However, this number differs from country to country and continent to continent.

THE VITAL PLACE OF MSMEs

- MSMEs is a household name in African business setting in general and Nigeria in particular.
- It is important to note that before the Micro enterprises, are the least significant bit that is not recognized or known as relevant to the economy but remains the life wire of many families and occupying a vital place in the chain of business enterprises in Africa. It is called Nano.
- Nano businesses are less micro businesses that are run by one proprietor or two but not more than five in very informal ways. It is a distinct component within the MSMEs.
- This category of business entity became very prominent within the post-COVID period that witnessed layoffs and unprecedented hardship leading to scramble for survival.
- It is not in doubt that most African endogenous businesses are either Micro, Small or Medium Enterprises (MSMEs) before they grow to large enterprises.
- While very insignificant few grow to become big enterprises, greater and very significant numbers of them are in these categories of MSMEs.
- To buttress this, studies by the International Finance Corporation (IFC) and Pricewaterhouse Coopers (PwC) show that approx. 96%of Nigerian businesses are SMEs compared to 53% in the US and65%in Europe.
- About 96% of Nigerian businesses are MSMEs. This is against 53% in the US, 65% in Europe and 91% in South Africa. MSMEs contribute about 48% of GDP and 84% of employment in Nigeria
- In South Africa, 52% of GDP and 60% of employment. MSMEs account for 50% of Industrial

jobs, constitute about 90% of manufacturing sector in terms of number of enterprises.

- According to Mulae (2022) MSMEs in Kenya is comprising the majority (98%) of all business entities, registered and non-registered, in the country. The sector remains highly informal as only 20% of the 7.4 million MSMEs operate as licensed entities.
- Based on the above statistics of the volume of business activities carried out by these three African countries, who are major players, one can confirm and conclude that MSMEs are the major business players in Africa constituting about 95% on the average. Consequently, growing MSMEs in Africa is advancing endogenous African businesses for the growth and development of Africa.
- This however requires identifying and addressing some disruptions and teething issues of MSMES

ISSUES OF MSMEs

-

isruptions: Changing Technology; COVID-19; $4^{th}/5^{th}$
downturn arising from Financial Crises; Boundary disputes and Changes in Consumer.

- **Entrepreneurship Issues:** Entrepreneur's content: God Himself; Yourself (Me/You); Other People (Helpers)-Men; Time and Other Resources like Money, Materials
- **Innovation Issues:**
- Most African countries have *emerging innovation ecosystems*, Financing issue particularly for Research and Development leading to very poor investment in this important area. It has been documented that Africa lags drastically behind the rest of the world in global research and development investments. African countries account for just 0.9%, compared to Asia (44%), North America (27%) and Europe (21%)[2]. And South Africa alone contributed 0.88%—nearly all of Africa's share. (African Center for Economic Transformation, Challenges and Opportunities in the Innovation Ecosystem, 2021, March).
- Resistance to Change, General Economic climate, Quality of personnel, Government Support, etc

MSMEs CHALLENGES

- Lack of access to finance.

This is simply buttressed in a survey by The African Talent Company using Africa 118's small business database and Geo Poll's Computer Assisted Telephone Interviewing (CATI) survey technology, this project reached 300 MSMEs across Kenya, Nigeria and South Africa and it was found that MSMEs 75% of funding is self; 21% from family and friends; 11% received from banks and 3% from government

- Market Access Limitations
- RegulatoryHitches
- Skills Gap(s)
- High cost of running the business
- Infrastructural deficit
- Scarcity of mentorship and support system and structures, etc.

FUTURE IMPACTFUL SECTORS FOR SUSTAINABLE ENDOGENOUS AFRICAN BUSINESSES

- As seen earlier, a huge progress has been made in different sectors and opportunities still abound in these sectors and more.
- The sectors hold immense potential for economic development, job creation, and social progress in Africa and we reiterate as indicated below.
- **1.Fintech and mobile banking**

Africa has already experienced significant success in mobile banking, with mobile money solutions like FLOVEST, M-Pesa revolutionizing financial services. Continued innovation in fintech can enhance access to banking, microfinance, insurance, and investment opportunities, driving financial inclusion and economic empowerment.

- **2. Agriculture and agritech**

Agriculture remains the backbone of the majority of economies in Africa. By leveraging technology, data analytics, and smart farming techniques, African farmers can boost productivity, reduce post-harvest losses, access markets efficiently, and enhance the entire agricultural value chain.

- **3. Renewable energy**

Africa has abundant renewable energy resources, and leveraging these can address energy poverty, drive sustainable economic development, and mitigate climate change. Innovative solutions in solar, wind, and hydroelectric power can provide affordable and reliable energy access to underserved communities, while also creating job opportunities for the youth.

- **4. Healthcare and telemedicine**

Innovative health technologies and telemedicine solutions can revolutionize healthcare delivery in Africa, particularly in remote areas with limited access to healthcare facilities. By leveraging mobile devices, data analytics, and artificial intelligence, healthcare services can be made more accessible, affordable, and efficient, ultimately improving health outcomes.

RECOMMENDATIONS FOR SUSTAINABILITY IN ENDOGENOUS AFRICAN BUSINESSES (MSMES)

- Aligning MSMEs businesses to United Nations Sustainable Development Goals (SDGs) is key and should be pursued vigorously.
- Focus on Social Entrepreneurship, which is the purposeful art of identifying with the critical social needs of the unreached (vulnerable) citizens using innovative models that are sustainable.
- Establish common front for MSMEs in Africa. This is with a view to involving all African Presidents and major stakeholders establishing an umbrella African Institution concerned with standardization of definitions, formulation of policies and design of programmes that foster MSMEs in African.
- Ensure an update on regulations and standards and be quick to obey andcomply.
- Digitalization of MSMEs in Africa to meet the global trend as well as attracting world market through online platforms and integrating business models tonew technology that is easy and most convenient both to the operator and the end user
- Develop innovation ecosystems at regional levels will take a continent-wide effort, since some of the countries are still too weak to go it alone.

- **Supporting tech startups**

Tech startups are the engines of innovation and economic growth in today's leading economies whether in Asia, America, or Europe. By assisting African tech startups to find investors and business partners, governments can create an enabling environment that nurtures these budding enterprises.

- **International and Local media coverage**

To position Africa as a hub of innovation, regular media coverage in international and local media are indispensable. Positive stories that highlight African startups, their ground breaking solutions, and their potential to transform industries can attract global attention and further drive investment and partnerships.

A vibrant startup ecosystem and success stories should be regularly showcased to dispel misconceptions about the Continent and showcase Africa's technological progres

CONCLUSION

- Africa's economic growth and development, job creation, and social progress are intricately linked to prioritizing Endogeous African Businesses (MSMEs) through entrepreneurship and innovation and by extension assisting tech startups in finding investors and business partners, and engaging regular international and local media coverage.
- Embracing and focusing on sectors such as fintech, agriculture, renewable energy, and healthcare, African economies can unleash their immense potential and by extension economic growth and development.
- It is through sustained concerted efforts identified that Africa will truly position itself as a global powerhouse of entrepreneurship and innovation in driving endogenous African businesses for sustainable economic growth and development.

LEAD PAPER 2

IMPROVING THE EFFECTIVENESS OF AFRICAN BUSINESSES THROUGH THE ADOPTION OF APPRAISAL TECHNIQUES IN REAL ASSET INVESTMENTS: EMPIRICAL EVIDENCE

Professor O.M. Ogbulu,

Professor of Banking and Finance and current Vice-Chancellor of Abia State University, Uturu

INTRODUCTION

Micro, small and medium scale enterprises (MSMEs) form a large chunk of businesses in Africa, Nigeria inclusive as is evidenced in the private sector of any modern economy and they contribute significantly to economic growth through employment generation, growth in aggregate output, poverty reduction, income distribution and wealth creation. According to the World Bank (2022) MSMEs represent about 90% of businesses and more than 50% of employment worldwide; and formal SMEs contribute up to 40% of national income (GDP) in emerging economies. In a survey carried out by PriceWaterhouse in June, 2020, MSMEs accounted for 96% of the total number of businesses in Nigeria and together they contributed about 50% to the national GDP. In terms of ownership structure, 73% of these MSMEs are sole proprietorship while 14% are private limited liability companies (PwC's MSME Survey, 2020). Equally, MSMEs accounted for 96.7% of businesses, 87.9% of employment and 45.7% of national GDP in the year 2020 (SMEDAN, 2021).In the area of employment generation, studies by Ogah-Alo *et al*. (2019) as well as Kayanula and Quartey (2019) confirmed a significant and positive relationship between small and medium scale enterprises and employment generation. Both in numbers and economic role, MSMEs are recognized as the predominant form of businesses and employment and key actors for promoting more inclusive and sustainable growth, increasing economic resilience and improving social cohesion (OECD, 2021). Even the extant National Policy on MSMEs (2021-2025) clearly acknowledges that the significance of MSMEs as drivers of economic growth, in the improvement of national productivity and competitiveness is universally recognized.

But in spite of their strategic importance, large numbers and the attendant heterogeneity, stakeholder dissatisfaction with the performance of MSMEs remains palpable. MSMEs are weak and have very little influence on other economic actors. Even more worrisome is the fact that they are always characterized by controversial narratives. One of such controversies is the lack of agreement among scholars, agencies and countries in the adoption of the criteria for defining them. For instance, such parameters as asset base, sales turnover, paid-up capital, employment, technological base and location are frequently used. However, the current National Policy on MSMEs (2021 - 2025) adopted the twin criteria of employment and business turnover.

The other controversy dwells on their environment and potentials. For instance, it is recognized that the government has taken very bold steps and initiatives in all the key elements of the MSME environment shown below. It is regrettable however to observe that these policy reforms have not translated to significant improvements in the growth of MSMEs (Ogbulu, 1999). Based on OECD (2018)framework, the MSMEs environment is made up of four key elements - institutional/regulatory framework, access to markets, access to resources and entrepreneurial culture (fig 1). Each of these elements has critical items that interact in a dynamic fashion to engender a business enabling environment that varies from locality to locality.

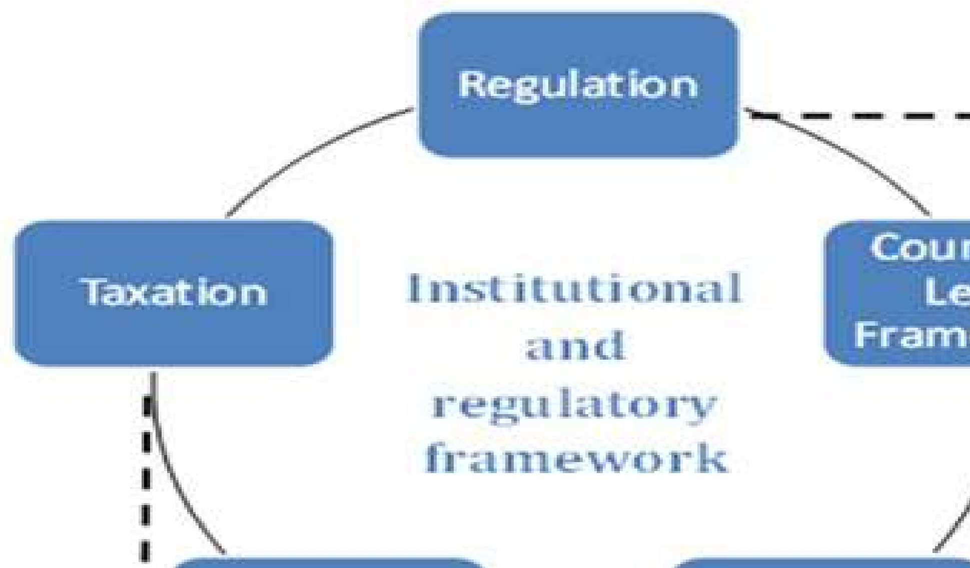

Fig 1: Environment of MSMEs
Source: OECD (2018). Strengthening SMEs and entrepreneurship for productivity and inclusive growth: 2018 SME Ministerial Conference. Available atwww.oe.cd/smes.

Expectedly, for MSMEs to support the industrialization process of the nation effectively and propel other sectors to growth and maturity, they require a balanced, effective and sustainable ecosystem. Unfortunately, the realization of such an ecosystem remains a mirage in developing countries. However, a major area of interest in the above environment in this study is the entrepreneurial culture and specifically the element of abilities which focuses on the entrepreneur or owner manager and his managerial competencies particularly with regard to decision making. There is no doubt about the importance of decision making competencies to managerial cum organizational success. Ordinarily, there are two major methods of decision making - rational and non-rational. While the rational approaches as embodied in decision theory, are factual, logical, objective and reliable, the non-rational approach which includes heuristics, is non-factual, subjective, non-logical and unreliable. Examples of non-rational approaches are experience, intuition and hunch. Though these approaches have their merits and demerits, it is generally recognized that the rational approach which includes appraisal techniques and other quantitative methods are more effective particularly in the face of the increasing complexity of the business environment. Ironically, the more complex the environment, the greater the tendency of owners and managers of MSMEs to resort to non-rational approaches which they consider as time saving and pragmatic.
This notwithstanding, the need for objective appraisal of investments in real physical assets in the face of economic uncertainties cannot be over-emphasized. It is imperative for MSMEs, to not only be familiar with sound investment appraisal techniques but to also make conscious efforts to religiously apply them whenever the need to decide on investment in real assets in their organizations arises. This is because effective investment decision making is fundamental to corporate survival and long term success of every enterprise. Investment appraisal techniques are decisive in boosting corporate performance as they involve evaluating and selecting long term investments consistent with the firm's goal of wealth maximization (Kengatharan & Diluxshan, 2017). In fact, Farragher *et al*. (1999) note that more accurate and reliable capital budgeting is needed by smaller firms if they are to grow, remain competitive and optimize the value of the firm. In addition, financial management theory advocates that the use of sophisticated capital budgeting system enhances firms' performance. On the other hand, wrong investment decisions have dire

consequences for the survival of any business and studies have shown that one of the critical factors accounting for high rate of business mortality in Nigeria and Africa in general is the non adherence to sound investment decisions. (Ogbulu, 1999).

Capital budgeting techniques are obviously crucial in arriving at sound investment decisions in any economy. Surprisingly, this is as far as theory goes. In practice, a wide gap exists between theory and practice. This is yet the source of another controversy which focuses on whether MSMEs do apply investment appraisal techniques before investing in real physical assets. For instance, while Ayodele (2010) and Kerubo *et al* (2016) found in their studies that small scale firms employ investment appraisal techniques Olawale *et al*. (2010) hold that small manufacturing firms do not use sophisticated investment appraisal techniques when evaluating projects. This therefore, raises some pertinent questions: Do MSMEs employ investment appraisal techniques in the management of their businesses and if yes, to what extent? Is there any significant relationship between the performance of MSMEs and investment appraisal technique adopted? To what extent do socio-economic factors influence MSMEs investment in real physical assets. This paper will attempt to provide answers to these questions which translate to three key objectives of the study.

It is in the light of the above that a paper such as this becomes very imperative with a view to closing the gap between theory and practice in capital budgeting as well as unraveling the factors that actually motivate MSMEs to invest in real physical assets in Nigeria and ensure sustainability of businesses in Nigeria and Africa in general.

LITERATURE REVIEW

Appraisal techniques, otherwise called capital budgeting is the process of objectively analyzing and evaluating the cost-benefits of investing in a project in order to decide whether resources should be allocated to a project or not. Capital budgeting is crucial to a firm's survival because it requires long term commitment of large outlay of funds which the firm must ascertain the best way to raise and repay. Theoretically, investment appraisal techniques can be divided into discounting and non-discounting techniques. Discounting techniques are those techniques that take into consideration the time value of money while non-discounting techniques do not. Examples of non-discounting techniques are the Payback Period also known as the Capital Recovery Method and the Average Rate of Return. On the other hand, discounting techniques include the Net Present Value Method, the Internal Rate of Return and the Profitability Index. The Discounted Payback Period is usually seen as a hybrid between the discounting and the non-discounting techniques by virtue of the fact that the method combines the attributes of both discounting and non-discounting in its formulation (Okafor, 1983). Each of these appraisal techniques has its merits and demerits and the investment scenario within which they are best suited. Other appraisal techniques that employ modern theory of investment analysis of option pricing and continuous cash flow streams as against discrete cash flows equally exist.

Empirical Literature Review

A very brief empirical review of extant literature shows that Ayodele (2010) examined how far SMEs in Nigeria use analytical techniques in project appraisal and the effect of such practice on the investment performance of firms. Findings of the study indicated that firms in Nigeria adopt the use of analytical appraisal techniques and that the use of Payback Period is more popular than others. Olawale et al (2010) investigated the impact of investment appraisal techniques on the profitability of small manufacturing firms in the Nelson Mandela Bay area of the Eastern Cape Province, South Africa. The study used survey data generated from 124 small manufacturing firms in the Despatch, Uitenhage and Port Elizabeth areas of the Nelson Mandela Bay to analyze their capital budgeting practices. The authors ascertained that small manufacturing firms' owners do not use sophisticated investment appraisal techniques when evaluating their proposed projects. Findings using multiple regression analysis confirmed the significant impact of investment appraisal techniques on the profitability of the small manufacturing firms; investment appraisal techniques have a negative impact on the profitability of small firms. Jifar (2020) studied the investment appraisal techniques of small and medium enterprises in Ethiopia. The study had three objectives that focused on the level of knowledge of appraisal techniques possessed by the firms; whether the firms apply appraisal techniques; and the factors that influence the choice of appraisal techniques. Based on descriptive survey involving the use of questionnaire on a sample size of 305 SMEs out of a target population of 1,278 licensed SMEs in the Wolaita Zone of Ethiopia, the researchers utilized descriptive statistics in arriving at their inferences and conclusions. Findings of this research were that SMEs operators had significant knowledge of investment appraisal techniques and that the SMEs operators also applied the investment

appraisal techniques to appraise their investments. The author recommends that the government and other service providers should focus more on the issue of investment decisions for small and medium scale enterprises and in particular, they should train SMEs on the investment evaluation techniques. Mogwambo et al (2015) examined the contribution of investment appraisal techniques on efficient portfolio selection in the soft drinks industry in Kenya. The research method adopted for the study is survey design with a target population of 250 respondents selected by census technique. Findings of the study indicate a strong correlation between investment appraisal techniques and investment alternatives with investment appraisal accounting for 85.7% of investments alternatives. Furthermore, ranking of the investment alternatives was influenced by the type of investment appraisal tools applied while a significant relationship exist between investment appraisal techniques and portfolio efficiency. Hence the authors concluded that the application of investment appraisal techniques influences efficient portfolio selection in the soft drink industry in Kenya. In addition, part analyses of the investment appraisal techniques on portfolio efficiency show that PBP has a higher significant relationship with portfolio efficiency. Study results equally suggest the need for firms to maximize the application of net present value and payback period to enhance portfolio efficiency to realize optimal performance. In another study, Kerubo *et al.* (2016) investigated the influence of investment appraisal techniques on financial performance of small manufacturing firms in Kisii town, Kisii County, Kenya. The authors employed the survey research methodology in which the target population of study was 454 respondents from small manufacturing firms in the Juakali sector, Kisii town. A sample size of 136 respondents was selected using stratified random sampling technique. Method of analysis adopted was the descriptive statistics. Findings of the study revealed that small manufacturing firms largely rely on non-discounting investment appraisal methods to assess their investments in the industry which in turn affected their performance. In addition, investment appraisal techniques had a positive relationship with financial performance of small manufacturing firms.

The study by Kengatharan and Diluxshan (2017) examined the relationship between use of capital investment appraisal practices and effectiveness of investment decision of listed manufacturing companies in Sri Lanka. The study employed a field survey from January to March 2017 and primary data were collected through self-administered questionnaire from randomly selected 20 listed manufacturing companies. Results of the study revealed that use of NPV and IRR have significant and positive relationship with effectiveness of investment decision while DPB has significant but negative relationship with effectiveness of investment decision of listed manufacturing companies in Sri Lanka. However, risk analysis techniques were not significantly related to effectiveness of investment decision. In another study, Wambua and Koori (2018) examined the effects of investment appraisal techniques and financial performance among small and medium enterprises in Nairobi County, Kenya. The authors adopted a descriptive survey research design with a target population of 71,195 licensed Medium Enterprises within the Nairobi County and a sample size of 384 SMEs. The empirical results of the study showed that investment appraisal techniques significantly affect financial performance among SME's in Nairobi County, Kenya. In addition, the results indicate that payback period is the most important predictor for financial performance.

Ndanyenbah and Zakaria (2019) investigated the application of basic investment appraisal techniques by SME operators in the Tamale Metropolis in Ghana. The researchers employed the descriptive and referential research design by using the random sampling technique and structured questionnaire to collect data from a sample of 400 SME operators. The authors multinomial regression and Chi-square analysis in testing the hypotheses of the study. The empirical findings of the study revealed that SME operators in the Tamale Metropolis had significant knowledge in basic investment appraisal techniques and that there was a significant application level in the various investment appraisal techniques. It was also discovered that SME operator's knowledge in an investment appraisal technique had insignificant influence on its application by the operator. The authors also found that the choice of investment appraisal technique by the SME operators was significantly influenced by the SME operator's gender, educational level, risk behaviour, investment size and the business or industry type while regulation or legal requirement was found to have insignificant influence on the choice of investment appraisal technique.

METHODOLOGY

The study adopted descriptive and cross sectional survey research design which are in line with the nature of the phenomenon of interest. While the descriptive design enabled us to provide answers to the questions of who, what, when, where, and how associated with the research problem, the cross-sectional survey design provided a snapshot of the outcome and the characteristics associated with it for a

large number of respondents (Bethlehem, 1999; Kombo & Tromp, 2006). The reliability and validity of the survey instrument were determined based on a pilot study involving respondents drawn from Aba in Abia State. The test-retest technique was employed to test for the reliability of the test instrument while the entire process of preparing and constructing the questionnaire was subjected to expert evaluation to achieve both content and face validity. In addition, construct validity was determined based on past research works and extant theory. This is in line with Moser and Kalton's (1997:356) observation that the essence of construct validity is its dependence on theory and that the examination of the observed associations is as much a test of the theory as of the scale's validity. Another factor that strengthened the validity of the instrument is the fact that the variables of the topic have general applicability and some of the variables of interest had been investigated in the past.

The study relied on both primary and secondary data. Self-reporting questionnaire was used to elicit primary data which were critical to the understanding of the experiences of the respondents. The questionnaire has both structured and open-ended questions that elicited individual opinions. The structured questions ranged from 3 point to 5-point Likert scales. The questionnaire was administered to the owners and managers of the firms.

The study focused on MSMEs in four (Abia, Anambra, Imo and Ebonyi) of the five states of the South-East geo-political zone. However, the target population of the study and the sample size were first determined State by State and later aggregated. Taken into account the fact that the MSMEs is an aggregation of formal and informal components, the determination of the target population involved multi-stage procedure. While the directories/records of State Chambers of Commerce, NASSI, Ministries of Commerce and Industry were used in generating the population of small and medium-scale enterprises, due to their informal nature, it was difficult finding a reliable and authentic register of micro enterprises. As a result, the population of micro enterprises was treated as infinite. Consequently, in calculating the sample sizes, we utilized Krejcie & Morgan sample size table to determine the sample size of small and medium size enterprises and Cochran's formula for infinite population was utilized in calculating the sample size of micro enterprises. Based on the Agency records which were purged to remove nominal firms, the target population of small and medium enterprises was seven hundred and thirty firms. Based on Krejcie and Morgan table, an aggregate sample size of 487 was derived. On the other hand, based on Cochran's formula for infinite population, the sample size of micro enterprises for the four states was 385. Table 1.1 on the next page shows the target population and sample size for the groups of firms arranged according to States.

Table 1: Questionnaire distribution

State	Target population for small and medium firms	Sample size for small and medium firms	Sample size for micro firms *(Proportion)*	Total number of questionnaire administered	Number and percentage of questionnaire returned
ABIA	260	155	137	292	206 (38.15%)
IMO	140	103	74	177	84 (15.56%)
EBONYI	130	97	69	166	80 (14.81%)
ANAMBRA	200	132	105	237	170 (31.48%)
TOTAL	730	487	385	872	540

Source: Field work, 2023.

The sampling technique was equally multi-stage involving stratified, random and judgemental. While stratified and random sampling were used for small and medium sized firms, the selection of micro firms was judgemental.

The data analysis techniques employed in this research included descriptive statistics, frequency distribution, weighted average index and charts. In addition, ordinal and multinomial logistic regressions were used in testing the hypotheses on SPSS software package. Ordinal logistic regression can be modelled thus:

RESULTS

Table 2 highlights the distribution of the firms based on a number of criteria, viz, type of business, educational qualification, value of total asset, expenditure on equipment, involvement in formal risk analysis and formal planning with cash flow projection. On the basis of the type of business the firm was

engaged in, the respondents were grouped into primary (extractive, mining, farming), secondary (manufacturing and fabricating) and tertiary (service). Out of 539 respondents, table 2 shows that majority of the firms (229 or 42.5%) were engaged in service delivery. This was followed by manufacturing (216 firms or 40.07%) and extractive/farming (94 firms or 17.44%). Given the role of education in an individual's world outlook and usage of sophisticated techniques, we ascertained the level of education of the respondents and the results show the following: WASC (204 or 37.85%), B.Sc/HND (266 or 49.35%), Masters (54 or 10.02%) and Doctorate (15 or 2.78%). Clearly, majority of the respondents possessed either university degree or Higher National Diploma. But even more revealing is the fact that all levels of educational attainment are represented in the sample. As part of the MSMEs boundary delineation, the question on the value of total asset reveals thus: <₦10 million (201 or 37.5%), ₦11-N20 million (181 or 33.77%), ₦21 - ₦30 million (65 or 12.13%), ₦31 -₦40million (44 or 8.21%) and >₦40 million (45 or 8.39%). On the basis of value of total asset, those with an asset value of less than ₦10 million were in the majority. Related to the value of total asset is the annual expenditure on equipment which grouped the firms into fours categories, viz <₦1million (188 or 35.27%), ₦1 - ₦2.5 million (181 or 33.96%), ₦2.6 - ₦5million (78 or 14.63%) and >₦5 million (86 or 16.14%). In line with value of total asset, those who spent less than one million naira on equipment were in the majority. Based on formal risk analysis, the table shows that greater percentage, 40.90% or 218 of the respondents do not conduct formal analysis of investment alternatives. On the other hand, while 38.84% or 207 respondents sometimes carry out formal risk analysis, 20.2% or 108 respondents always carry out formal risk analysis. Similarly, the firms differed in their propensity to conduct formal plans with cash flow projection. While 19% or 103 respondents always engage in formal planning with cash flow projections, 40% or 213 respondents did so sometimes. However, 41% or 213 respondents never engaged in planning with cash flow projections.

Table 2:Distribution of Responses to key attributes

	frequency	%	Expenditure on equipment	frequency	%
Type of business:			<N1m	188	*35.3*
Primary	94		₦1 – 2.5m	181	*34.0*
Secondary	216	*17.4*	N2.6- 5m	78	*14.6*
Tertiary	229	*40.1*	>N5m	86	*16.1*
Total	**539**	*42.5*	Total	**533**	***100***
		100			
Educational Qual:			**Risk analysis**:		
WASC		*37.8*	Never		*40.9*
BSc/HND	204	*49.4*	Sometimes		*38.8*
Masters	226	*10.0*	Always	218	*20.3*
Doctorate	54	*2.8*	Total	207	***100***
Total	15	*100*		108	
	539			**533**	
Total asset:			**Formal plan with**		
<N10m			**cash flow projections**:		
N11-20m		*37.5*	Never	216	*40.60*
N21-30m		*33.8*	Sometimes	213	*40.04*
N31 -N40m	201	*12.1*	Always	103	*19.36*
>N40m	181	*8.2*	Total	**532**	***100***
Total	65	*8.4*			
	44	***100***			
	45				
	536				

Source: field work 2022

Objective 1 focuses on whether MSMEs adopt rigorous appraisal techniques in making investment decisions and to what extent. The emerging hypothesis from this composite objectives was tested with a multinomial logistic model and the outputs are shown below.

Table 3: Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	796.218			
Final	580.664	215.554	40	.000

Table 2, the model fitting information, shows that the coefficients are statistically significant (p-value <.050) which confirms that the full model statistically and significantly predicts the dependent variable better than the intercept-only model alone.

Table 4:Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	544.171	388	.120
Deviance	481.170	388	.321

Table 4 - Goodness of fit - based on the values shown in the table, both the Pearson and Deviance chi-square values show that the model fits the data well. Table 5 - Likelihood ratio test shows which of the independent variables is statistically significant. The table identified two techniques with p <0.05 – the payback period (p = .000) and profit index (p < .024).

Table 5:Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	580.664[a]	.000	0	.
PAYBP	627.408	46.744	8	.000
INTERNALRR	590.075	9.411	8	.309
NETPV	594.538	13.874	8	.085
ACCRR	595.655	14.991	8	.059
PROFITI	598.285	17.621	8	.024

The Parameter estimates table (shown in the appendix) presents the coefficients of the model. The parameter estimates table shows that each dummy variable has coefficients for the different techniques. The coefficients that are significant are summarized in table 6.

Table 6:Significant coefficients

Sometimes	Intercept	B	Std Error	Wald	df	Sig	Exp(B)	95% confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
	PAYBP-2	1.918	.650	8.713	1	.003	6.809	1.905	24.339
	PAYBP-3	2.488	.612	16.556	1	.000	12.043	3.632	39.930
	PAYBP-4	1.774	.639	7.700	1	.006	5.894	1.684	20.632
	NETPV-1	-2.253	1.124	4.017	1	.045	.105	.012	.952
	PROFITI-1	1.589	.666	5.694	1	.017	4.897	1.328	18.056
	PROFITI-3	1.377	.658	4.370	1	.037	3.961	1.090	14.400
	PROFITI-4	1.405	.683	4.228	1	.040	4.074	1.068	15.537
Always	PAYBP	2.433	.706	11.882	1	.001	11.389	2.856	45.417

NOTE; Though there are three categories of the dependent variables, formal risk analysis, the 'never' category was used as reference category and so only two logits (i.e logistic regression coefficients) are shown. The 'sometimes' row represents a comparison of the category with the 'never' category and the second row is a comparison of the 'always' category to the 'never ' category.

PAYBP-2: The relative risk of managers who rarely use PBP compared to those who don't would be expected to increase by a factor of 6.809 given that the other variables in the model are held constant. In other words, managers who rarely use PBP compared to those who don't are more likely to carry out formal risk analysis of investments.
PAYBP-3:The relative risk of Managers who sometimes use PBP compared to those who don't,would be expected to increase by a factor of 2.488 given the other variables in the model are held constant. In other words, managers who sometimes use PBP compared to those who don't are more likely to carry out formal analysis of the risk of investments.
PAYBP-4:The relative risk of managers who often use PBP compared to those who don't would be expected to increase by a factor of 5.894 given the other variable in the model are held constant. In other words, managers who often use PBP compared to those who don't are more likely to carry out formal risk analysis of investments.
NOTE: The relative risk ratio (relative log odds) of sometimes instead of never carrying out formal risk analysis will increase by 5.894 as one moves from the lowest level (never) to the highest (always).
NETPV-1: The relative risk of managers who never use NETPV compared to those who use would be expected to decrease by a factor of 0.105 given that the other variables in the model are held constant. In other words, managers who never use NETPV compared to those who do are less likely to carry out formal risk analysis of investments.
PROFI_TI-1: The relative risk of managers who rarely use PBP compared to those who don't would be expected to decrease by a factor of 4.897 given that the other variables in the model are held constant. In other words, managers who never use PROFIT INDEX are more likely not to carry out formal risk analysis of investments.
PROFI_TI-3: The relative risk of Managers who sometimes use PROFIT INDEX compared to those who don't,would be expected to increase by a factor of 3.961 given the other variables in the model are held constant. In other words, managers who sometimes use PROFIT INDEX compared to those who don't are more likely to carry out formal analysis of the risk of investments.
PROFI_TI-4:The relative risk of managers who often use PROFIT INDEX compared to those who don't would be expected to increase by a factor of 4.07 given the other variable in the model are held constant. In other words, managers who often use PROFIT INDEX compared to those who don't are more likely to carry out formal risk analysis of investments.
NOTE: The relative risk ratio (relative log odds) of sometimes instead of never carrying out formal risk analysis will increase by a factor of 4.07 as one moves from the lowest level (never) to the highest (always).

The only coefficient in the second row isPAYBP-1, expB = 11.389, p-.001). This is the relative risk ratio comparing non-usageof PBP to always category based on the second logit of the dependent variable. The relative risk of managers who don't use PBP compared to those who do would be expected to decrease by a factor of 11.389 given that the other variables in the model are held constant. In other words, managers who do not use PBP are not likely to carry out formal risk analysis of investments.

It is clear from the above values that MSMEs use some and not all appraisal techniques and that the usage is infrequent or irregular (sometimes) rather than always.

The second objective focused on the nature of the relationship that exists between the adoption of appraisal techniques and the performance of MSMEs. The derivative hypothesis was tested with an generalized linear model (GLM) and the output is shown thus: The Goodness of Fit table that the value/df of the Deviance and Pearson chi-square vary. While the Pearson chi-square falls outside the acceptable limit, the Deviance chi-square is within acceptable limit showing the appropriateness of the model.

Table 7: Goodness of Fit[a]

	Value	df	Value/df
Deviance	756.623	832	.909
Scaled Deviance	756.623	832	
Pearson Chi-Square	903.466	832	1.086
Scaled Pearson Chi-Square	903.466	832	
Log Likelihood[b]	-461.492		
Akaike's Information Criterion (AIC)	970.984		
Finite Sample Corrected AIC (AICC)	973.473		
Bayesian Information Criterion (BIC)	1072.468		
Consistent AIC (CAIC)	1096.468		

Dependent Variable: Extent of the effect of the use of appraisal techniques on overall profit after tax
Model: (Threshold), PAYBP, INTERNALRR, NETPV, ACCRR, PROFITI

Table 7 is the Omnibus test which shows a p-value of <0.05 which confirms that the intercept model is good.

Table 8: Omnibus Test[a]

Likelihood Ratio Chi-Square	df	Sig.
174.652	20	.000

Dependent Variable: Extent of the effect of the use of appraisal techniques on overall profit after tax.
Model: (Threshold), PAYBP, INTERNALRR, NETPV, ACCRR, PROFITI

Table 8 which is the tests of model effects shows that only one technique – PAYBP (p = .000). has discernible effect on performance (profitability).

Table 9: Tests of Model Effects

Source	Type III		
	Wald Chi-Square	df	Sig.
PAYBP	36.103	4	.000
INTERNALRR	7.724	4	.102
NETPV	7.608	4	.107
ACCRR	5.446	4	.245
PROFITI	6.398	4	.171

Dependent Variable: Extent of the effect of the use of appraisal techniques on overall profit after tax
Model: (Threshold), PAYBP, INTERNALRR, NETPV, ACCRR, PROFITI

The parameter estimates table (appendix B) shows three coefficients that are significant as summarized in table 9.

Table 10: Significant coefficients

Parameter	B	Std Error	95% Wald Confidence interval		Hypothesis testing		
			Lower	Upper	Wald chi- square	df	Sig
PAYBP-1	-1.795	.4395	-2.656	-.933	16.680	1	.000
PAYBP-2	-1.143	.4651	-2.055	-.232	6.042	1	.014
INTERNALRR -1	-1.546	.7895	-3.094	.001	3.835	1	.050

PAY_BP-1 (Never use), PAY_BP-2 (Rarely use) and INTERNAL_RR-1 (Never use). However, only the rare usage category of the payback technique is of relevance. Unfortunately, it has a negative coefficient which means that it has less likelihood of influencing a firm's profitability than using the technique always – the reference category.

Clearly, the outcome of the above test shows that there is a negative and significant relationship between the rare usage of appraisal techniques and firm performance.

The third objective focused on the extent to which socio-economic factors influence MSMEs investment in real physical asset. The corollary hypothesis was tested with ordinal logistic regression and the outputs are as follows:

The Model fitting Information table (table 11) shows a p= <0.05 which shows the appropriateness of the model. Equally the Goodness of fit table (table 12) shows that the two chi-square measures have p-values that are >0.05 which further confirm the goodness of the model.

The parameter estimates table shows that four factors, viz, inflation, economic growth, high interest rate and insecurity are significant. The estimated ordinal logistic regression coefficient that is significant are:

Table 11: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1212.582			
Final	1145.788	66.794	32	.000

Link function: Logit.

Table 12: Significant coefficients

Intercept	B	Std Error	Wald	df	Sig	95% confidence Interval for Exp(B)	
						Lower Bound	Upper Bound
INFLATION-2	.839	.335	6.259	1	.012	.182	1.496
INFLATION-4	.616	.252	5.967	1	.015	.122	1.109
ECOGROW-3	.637	.298	4.576	1	.032	.220	1.053
HINTR-1	-1.603	.469	11.659	1	.001	-2.523	-.683
INSECURITY-3	.853	.275	9.605	1	.002	.314	1.393

*INFLATION-2, is the dummy variable for the ' very low extent' dimension of inflation. The positive estimate shows that it has the likelihood of increasing investment in real physical assets.

INFLATION-4, is the dummy variable for high extent dimension of inflation. The positive estimate shows that it has the likelihood of increasing investment in real physical asset.

ECOGROW-3, is the dummy variable for the low extent dimension of economic growth. The positive estimate shows that it has the likelihood of increasing investment in real physical asset.

HINTR-1, B is the dummy variable for the not applicable dimension of high interest rate. The negative estimate clearly shows that it has the likelihood of decreasing investment in real physical asset.

INSECURITY-3, is the dummy variable for the low extent dimension of insecurity. The positive estimate shows that it has the likelihood of increasing investment in real physical asset.

NOTE: The socio-economic factors that influence investment in real physical asset are inflation, economic growth and insecurity. However, they vary in terms of the extent of influence. For instance, while inflation exerted influence to a high extent, insecurity influenced investment in real asset only to a low extent.

DISCUSSION OF FINDINGS

The multinomial regression test that focused on the first objective shows that MSMEs use some appraisal techniques but at an infrequent or irregular rate. This is in line with the findings of Ayodele (2010), Olawale *et al* (2010) and Jifar (2020) Understandably, there are many appraisal techniques from which a manager can, given the underlying objectives of the investment, choose from. However, the key issue is the frequency of usage which is determined by a number of factors. For instance, doubt and lack of appropriate knowledge are often responsible for half-hearted adoption of new ideas or techniques which in turn increases the chances of failure of the new idea or technique. There is no doubt that the use of appraisal techniques comes with a number of challenges which do not disappear at the first contact. It is only through frequent and regular usage that managers are able to effectively navigate through the challenges and develop the capacity to harness the potentials of appraisal techniques.

The generalized linear model test that focused on the second objective shows a negative but significant relationship between the use of appraisal techniques and firm performance proxied by profitability. This corroborates the works of Olawale *et al* (2010) but is contrary to the findings of Kerubo *et al* (2016) and Wambua and Koori (2018) who discovered that the use of appraisal techniques have positive impact on a firm's profitability. The apparent lack of agreement among authors can be explained based on a number of factors such as extent of usage. A casual or irregular usage of appraisal techniques as earlier noted will not yield the desired level of effectiveness. Persistence in usage is necessary to actually confirm the effectiveness or otherwise of a technique.

The ordinal logistic regression test that addressed the third objective which centered on the influence of socio-economic factors identified three significant factors, viz inflation, economic growth and insecurity. However, these factors exerted varying degrees of influence. While inflation exerted influence on a high extent, economic growth and insecurity influenced investment decisions to a low extent. Understandably, the prepotency of the factors varies. For instance, the spate of insecurity varies from one geo-political zone to another. As a result, certain factors may exert more influence than others at any given point in time.

POLICY IMPLICATIONS

It is clear from the foregoing that MSMEs exhibit half-hearted adherence to the adoption of appraisal techniques. This point to a lack of conviction or necessary zeal to embrace the rational approach to decision making. In this wise, the focus of government should be on how to develop the managerial capacities of managers and owners of MSMEs. In specific terms, the following policy measures would be useful in bringing about the needed re-orientation of managers and owners of MSMEs.

Policy measures should focus on the development of the managerial competencies and knowledge of owners and managers of MSMEs through the instrumentality of Business Development service providers. The UNCTAD (2002) recognizes business services as all types of MSME support services such as training, consulting, technical and managerial assistance, marketing, physical infrastructure and policy advocacy. Government should be able to stimulate the demand for such services by MSMEs through matching supply with demand, providing incentives and defining the framework and guidelines for such relationships. Government should provide enabling environment for business linkages between big businesses such as MNCs and smaller enterprises. Such linkages which may be based on R & D and resource acquisition provides numerous benefits such as exposure to national and global business trends and repertoire of experiences and practices. The cultivation of university-industry collaboration will provide opportunities to MSMEs to acquire and strengthen their managerial knowledge base.

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SPECIAL FEATURE:
RELEVANCE OF MANAGEMENT SCIENCES IN SPECIALIZED FEDERAL UNIVERSITIES

GOVERNMENT POLICY DIRECTIVES ON THE RELEVANCE OF MANAGEMENT SCIENCE PROGRAMMES AS ALLIED PROFESSIONAL DISCIPLINES IN SPECIALIZED UNIVERSITIES IN NIGERIA: AN ADVOCACY FOR A DIVERSIFIED EDUCATIONAL MODEL

[1]Ihendinihu, John U., [2]Udo, Okey O., [1]Ani, Wilson U. and [1]Ekwe, Mike C.
[1]Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.Emails:
[2]Emmanuel University Raleigh, NC, USA and the Managing Director, VOG Global Investment Limited and VOG Global Farms, USA.
Corresponding author: ihendinihu.john@gmail.com

ABSTRACT
Specialized Universities (SUs) play a pivotal role in advancing specific fields of knowledge in national contexts. This paper critically evaluates the Nigerian government's policy directives concerning the legal mandate for introducing allied professional disciplines in SUs. Through a profound interpretation of the Object Clause in the legal instruments that established Specialized Federal Universities (SFUs) in Nigeria, we illuminate the socio-political consequences of these policy directives within the Nigerian educational landscape. Drawing insights from global case studies, we compare Nigeria's approach with academic programs in SUs from various countries, emphasizing the widespread adoption of diversified and comprehensive educational models. These global models often showcase mutual reinforcement between core specializations and allied professional disciplines, fostering holistic education and broader societal impacts. In conclusion, the paper advocates for Nigeria's SUs to embrace a more integrative approach, mirroring successful global paradigms, ensuring the nation's graduates are both specialized and well-rounded in their preparedness for contemporary challenges.
Keywords: Government policy, specialized Universities, legal mandate, allied professional disciplines, diversified educational model

INTRODUCTION

Specialized schools are educational institutions with enhanced coverage of specific subjects or disciplines, or programmes that constitute the specialization of such institutions. The primary objective of specialized Universities, when compared with conventional Universities, is their focus on some specific fields or sectors of the economy based on their considered importance to national development and their capacity to reposition the country to meet the challenges in the field/sector. Institutionalizing such fields/sectors is intended to stimulate special educational needs for the area(s). Generally, such Universities focus on addressing the dearth of knowledge and skilled manpower in the specialized fields/sectors for more significant national impact. Special need areas are often initiated by national priorities and modified with dynamism in the needs of the general public/society. Strategic areas that are often identified and targeted in Nigeria include Agriculture, Technology, Military, Health, Education, and Petroleum.

Agriculture and Technology have long been recognized as indispensable and strategic sectors for all societies (Joshi, 2019 Dogan, *et al.*, 2013). This explains why any emphasis placed on these sectors (including the establishment and promotion of special career parts and specialized educational institutions to encourage studies and research in these areas) can always be considered reasonable. Therefore, the establishment of specialized federal, state, and private universities in Nigeria with a focus on agriculture and technology is a step in the right direction. The extent to which the canvassed intentions for establishing these SUs materialize depends mainly on the willingness of policymakers and managers of such specialized institutions to translate the declared political intentions into sustained political commitment in line with global best practices in running SUs.

In the United Kingdom, for instance, specialist school programmes were initiated by the government to encourage secondary schools in England to specialize in certain areas of the curriculum to boost achievement. The Education Reform Act of 1988 then introduced a new compulsory subject of Technology. The City Technology College was established as a center of excellence in the area as there were insufficient funds to equip all schools to teach the subject (Wikipedia). As funding and societal demands for new areas increased, the emphasis was shifted from a center of excellence to a means of driving up standards in institutions. Hence, the program was opened to all schools, while specialism in other fields was added in 1996 to enhance the quality of the students. It became evident that specialization

as a center of excellence could only be achieved with a drive to improve the quality and standard of output from the specialized institutions. It was therefore considered expedient for complementary programs in Languages, Arts, Sports, and Business to be added to technology to realize the full potential that technology could offer. The realization of the symbiotic effects of offering complementary programs in educational institutions explains why most specialized Universities in the world have adopted the modified and comprehensive educational model as the best practice for achieving their core mandate.

It has consequently been argued that Specialized Universities (SUs) may be the answer to the dearth of manpower in some critical sectors of a nation (Lawal, 2017). Many countries established such institutions as a strategy for closing manpower gaps in different strategic sectors of their economies.Here in Nigeria, the first specialized tertiary institution is the Nigerian Defense Academy, Kaduna, which was established in 1964 to develop manpower within the military. The first two Federal Universities of Technology (FUT) were established in 1980 at Owerri and Bauchi, with the later converted to Conventional University and renamed Abubakar Tafawa Balewa University, Bauchi, in 1988. The third FUT was established at Akurein 1981, with each of the three FUTs representing the educational interests of their geo-political zones. The fourth FUT was established in 1983 at Mina in Niger State, while in 1984, FUT Yola was established in Adamawa State and converted to Conventional University and renamed Modibbi Adama University, Yola, in October 2011. In the area of Agriculture, the first two Federal Universities of Agriculture were established on January 1, 1988, at Makurdi in Benue State and Abeokuta, in Ogun State, while the third, Michael Okpara University of Agriculture (formerly known as Federal University of Agriculture) Umudike was established on November 13, 1992, in Abia State.

The Federal Universities of Technology were to give effect to the nation's drive for much-needed self-reliance in science, engineering, and technology. At the same time, the three Federal Universities of Agriculture were established to provide prompt solutions to farmers' practical problems, raise farm output and income, and accelerate the drive towards national food sufficiency. With these visions/missions in mind, state and private specialized Universities were subsequently established in Nigeria, with the Bells University of Technology established in 2004 at Ota as the first privately owned specialized University. At the State level, the Enugu State University of Science and Technology (formerly founded as Anambra State University of Science and Technology) was established in July, 1980, following after the Rivers State University of Science and Technology established in 1972 as Rivers State College of Science and Technology, and upgraded to University status in 1990. The extent to which the SUs in Nigeria realized/justified the central purpose for which they were set up as distinct tertiary institutions continued to raise serious concerns with an increase in public expectations and changes in societal needs, and these developments have become essential research areas.

In response to popular public demands on the need to adopt global best practices in the management of specialized Universities and thus enhance the drive for national development (particularly in States without any Conventional Universities), the Federal Universities of Agriculture and Technology mounted *allied professional programmes* in Management Sciences and Management Technology among other areas. They equally sought and secured the approval of the National Universities Commission (NUC) for the programs following the Commission's due process for resource assessment and program accreditation based on Minimum Benchmark Academic Standards (BMAS) for Universities in Nigeria. Many of the Management Science programs were subsequently evaluated and accredited by their respective professional bodies for quality assurance on the professional contents of the programs and mentorship. The programs continued to make strategic contributions to the development of quality manpower in various areas of Management Sciences for over fifteen (15) years, during which the programs were mounted in Specialized Federal Universities (SFUs). Some of their graduates are notable scholars in tertiary educational institutions in Nigeria and abroad, with a good number gainfully employed in other sectors and economies.

However, in 2017, the Federal government initiated actions to review academic programs offered by SUs in Nigeria and accordingly considered some allied programs, including Management Science and Management Technology programs, as outside the mandate of SUs. The government directive was to gradually scale down and eventually delist management science/technology disciplines in SUs based on misconceptions built on the perceptions that the intent of the legislature in the provision for "***allied professional disciplines***" does not cover academic programmes in Management Sciences and Management Technology. This presumption, with the resulting government directive, is contrary to the clear letters of the Acts that established the SFs in Nigeria. This directive also overlooked the fact that agriculture and technology are intertwined and inseparably interwoven with management science programmes. This

connection was documented in Karakaya (2009), which provided a historical overview of accounting applications in agricultural activities in Turkey and concluded that agricultural activities could only develop with the proper application of accounting practices and, by extension, the entire area of Management Sciences.

This government directive, however, generated agitations from other stakeholders in the education sector and the general public(COLMAS Position Papers, 2017 & 2018 and Jayeola, 2017) asserting that the directive was tantamount to policy inconsistency/summersault of delisting previously approved and fully accredited management science/technology disciplines in Specialized Universities of Agriculture and Technology in Nigeria. In their separate and independent reactions, the State-ownedSUs changed their names to reflect conventional University status to evade the adverse effects of the directive on their academic disciplines. For instance, the Rivers State Government renamed the institution as Rivers State University with a mandate to operate as a Conventional University in 2017, while Anambra State University of Science and Technology had earlier jettisoned its specialized status to embrace the status of a conventional University with a change of its name to Abanbra State University (and later, in 2014) to Chukwuemeka Odumegwu Ojukwu University, Awka). The Specialized Federal Universities (SFUs) of Agriculture and Technology in Nigeria are still seeking government reconsideration of its later directives on the relevance of Management Science and Management Technology programmes established and run in SFUs based on official approvals granted by the government regulatory agency in tertiary education in Nigeria, the National Universities Commission (NUC).

A number of questions have continued to trail the new policy directive of the government on the relevance of management science/technology programmes in SFUs in the country, and these include:

a) Does the co-existence of Management Science/Technology programs and core programs in Agriculture and Technology in the same learning environment prevent the specialized Universities from realizing their mandate for teaching, research, and extension services in Agriculture/Technology?
b) Are the core programmes of Federal Universities of Agriculture and Technology competing for the same applicants during admissions with the allied disciplines in Management Sciences /Technology? Or do they have the exact entry requirements?
c) Are programs in Management Sciences /Technology offered by conventional Universities in Nigeria (like Ahmadu Bello University, University of Nigeria, University of Ilorin, Obafemi Awolowo University, University of Ibadan, and Covenant University) negatively affected/affecting the performances/outputs of their programs in Agriculture/ Technology?
d) What scientific breakthroughs in teaching, research, global ranking, and extension services did core programmes in Agriculture/Technology make during their more than ten years of existence before the allied programmes in Management Sciences/Technology were established, and could their low output and general lack of global visibility and ranking still be blamed on the yet to be established allied management science/technology disciplines. Or put differently, in what ways are the potentials/capacities/performances of core agricultural/technology programs being retarded by the establishment of these allied professional programs in Management Sciences/Technology?
e) Can programmes in other non-Agricultural/Technology Faculties (like Physical Sciences and Natural Sciences, for instance) qualify as allied/related disciplines to Agriculture/Technology while programmes in Management Sciences/Technology are not similarly considered when they all offer teaching and research support to programmes offered in other Colleges/Schools in the specialized Universities?

The answers to these questions are not and can never be in the affirmative. The implication is that the problems of specialized Federal Universities do not lie in the co-existence of the core programs with the allied professional disciplines. The programs neither compete with nor inhibit each other from realizing their full potential; instead, they complement and enrich each other for the realization of the mandates of the specialized universities. Programs in Management Sciences/Technology are as allied to core programs in Agriculture/Technology as their counterparts (Mathematics, Statistics, Computer Science, etc.) offered in the Colleges of Physical and Natural Sciences, as they both offer foundational and complementary services to the core programs in agriculture/technology. To blame the inability of SFUs to bridge the observable gaps in the quality of manpower needed in Agriculture and Technology on the breach of mandate by the establishment of allied professional disciplines in Management Sciences is clearly an indirect way of evading solutions to the real challenges bedeviling SFUs in Nigeria.

This paper, therefore, assesses this policy directive against the backdrop of the statutory mandates of SFUs of Agriculture and Technology in Nigeria, the symbiotic model of co-existence of economic sectors in a financial system, and global best practices in the management of SUs across different countries in other continents. The objective is to provide justifications for the Nigerian government to adopt a Diversified Educational Model by allowing Management Science/Technology programmes to continue to run as Allied Professional Disciplines in all SUs in Nigeria. This position is consistent with thelegal mandates of SUs in Nigeria and global best practices in the management of specialized tertiary institutions across the world.

The paper is presented in five sections. The first provides background information on SUs in Nigeria, and the second presents six justifications for accepting and running management science/technology programs as Allied Professional Disciplines in SUs in Nigeria. The third discusses the real challenges requiring urgent actions from the Nigerian government in the management of SUs in the country. Section four focuses on the socio-economic and political implications of delisting Management Science/Technology programs from the curricula of SUs in Nigeria. In contrast, the fifth section, which provides the impetus for adopting a diversified educational model in SUs in the Nigerian education system, marks the end of the paper.

Justifications for establishing Management Science/Technology Programs as Allied Professional Disciplines in Specialized Universities in Nigeria.

A number of reasons have been advanced to justify the need for the establishment of Management Science/Technology programmes as Allied Professional Disciplines in SUs in Nigeria. These justifiable advocacies range from consistency with the legal mandate of Specialized Federal Universities in Nigeria through the emerging trends in global best practices in the administration of SUs in other continents, the linkage provided in the domestication of financial reporting standards and packages for agricultural activities within the domains of management sciences, the uniqueness of management science programmes offered in SFUs in Nigeria, to the model provided through the existing symbiotic co-existence of the agricultural sector with other economic sectors in the national economy, and the negative implications of delisting Management Science Programmes from SUs in Nigeria.

The Legal Mandates of Specialized Federal Universities in Nigeria

Management Science and Management Technologyprogrammes in specialized Federal Universities in Nigeria are within the mandates of the instruments that created the Federal Universities of Agriculture (FUA) and the Federal Universities of Technology (FUT) in the country (COLMAS Position Paper, 2018). The legitimacy of Management Science programs in Federal Universities of Agriculture in Nigeria is clearly enshrined in the Object Clause of the Federal Universities of Agriculture Act, 2004, as amended to date. Section 2(3) of the Act mandates the FUA to award degrees "**in Agriculture, agricultural engineering and Allied Professional Disciplines**," providing for a tripartite ***mandate of teaching, research, and extension in Agriculture and allied disciplines.*** Section 2(3)(b) of the Act specifically provides that each of the three Federal Universities of Agriculture in Nigeria is:

To develop and offer academic and professional programmes leading to the award of diplomas, first degrees, post-graduate research, and higher degrees which emphasize planning, adaptive, technical, maintenance, developmental, and productive skills ***in agriculture, agricultural engineering, and allied professional disciplines*** *with the aim of producing socially mature persons with capacity to improve on those disciplines and develop new ones, but also to contribute to the scientific transformation of agriculture in Nigeria.*

Section 2(3)(b)of the Federal University of Technology Act, 1986(as amended) equally provides for the object of each of the Federal Universities of Technology. This section has identical mandates as specified for the Federal Universities of Agriculture, viz.:

To develop and offer academic and professional programmes leading to the award of diplomas, first degrees, post-graduate research, and higher degrees which emphasize planning, adaptive, technical, maintenance, developmental, and productive skills ***in engineering, scientific, agricultural, medical, and allied professional disciplines*** *with the aim of producing socially mature men and women with the capability not only to understand, use and adapt existing technology but also to improve on it and develop new ones;*

Again, section 2(3)(g) of the FUA Act, 2004 (which accords perfectly with section 2(3)(g) of the FUT Act, 1986 as amended) requires each of the Universities of Agriculture (and Universities of Technology):

To provide and promote sound basic scientific training ***as a foundation*** *for the development of agriculture and allied disciplines, taking into account indigenous culture, the need to enhance national unity, the need* ***to vastly increase the practical content of student training****, and adequate preparation of graduates for self-employment in agriculture and allied professions.*

The legal mandate provided under S.2(3)(b)&(g) of the two Acts can be seen from two perspectives:

1. ***Mandate to award diplomas and degrees in Core Disciplines; that is, disciplines in agriculture and agricultural engineering for FUA, and in engineering, scientific, agricultural, and medical disciplines for FUT* - S2(3)(b)**
2. ***Mandate to award diplomas and degrees in Allied Professional Disciplines; that is, all non-core disciplines* that are required to provide foundational and complementary teaching and research services to core disciplines in agriculture/technology on the one hand and to every other allied professional discipline in SUs on the other.**

Thus, allied professional disciplines are required to:

a) provide and promote basic training ***as a foundation*** for the development of core disciplines in agriculture/technology and allied disciplines - S.2(3)(g);
b) vastly increase the practical content of students' training - S.2(3)(g);
c) produce socially mature persons with the capacity to improve on those disciplines and develop new ones - S.2(3)(b);
d) adequately prepare graduates for self-employment in both agriculture/technology and allied professional disciplines -S.2(3)(g); and,
e) contribute to the scientific transformation of agriculture in Nigeria - S.2(3)(b).
f) Item a) relates to ***foundational function***, while items b) and e) relate to ***complementary functions*** that Management Science/Technology disciplines perform in the Federal Universities of Agriculture/Technology as allied disciplines.

On the basis of these provisions, ***allied disciplines*** in the context of the original mandates of the specialized Federal Universities in Nigeria should be appropriately interpreted to mean all such programmes/disciplines which offer foundational and complementary teaching and research opportunities to core agricultural and technology programmes in the specialized Federal Universities (COLMAS Position Papers, 2017 and 2018). **Examples of *allied professional disciplines* that offer foundational and complementary functions in SUs include programmes in:**

1) **Physical and Applied Sciences – Mathematics, Chemistry, Physics, Computer Science, and Statistics.**
2) **Social and Management Sciences – Accounting, Banking and Finance, Marketing, Economics, Entrepreneurial Studies, Business Administration, Industrial Relations and Personnel Management,** Transport Management Technology, Project Management Technology, Maritime Management Technology, Information Management Technology, Financial Management Technology, **etc.**
3) **Medical and Health Sciences – Medicine, Pharmacy, Nursing Sciences, Laboratory Technology, etc.**
4) **Natural Sciences–Microbiology, Biochemistry, etc.**
5) **Non-agric. engineering disciplines –Mechanical Engineering, Electrical Electronics Engineering, etc.**
6) **6) Education – Science Education (like Edu/Agriculture, Edu/Mathematics, Edu/Biology, Edu/Physics, Edu/Chemistry, Edu./Computer Science), Business Edu/Business, etc.**
7) The main objective for establishing these allied disciplines in SFUs was to provide complementary teaching and research opportunities required for driving up the quality and standard of all graduates from programmes offered in SFUs and for the needed scientific transformation of agriculture and technology in Nigeria. The allied programs are also expected to prepare graduates of the SFUs for self-employment better and to be more relevant in enhancing national development. It should be emphasized that all the programs in the physical and applied sciences, medical and health sciences, natural sciences, education, and non-agricultural engineering programs are considered and accepted as allied professional disciplines in the SFUs based on the foundational and complementary teaching and research opportunities they offer. They are accordingly allowed to develop and offer academic and professional programs leading to the award of diplomas, first degrees, post-graduate study, and higher degrees in their respective programs in the same way that the core disciplines in agriculture/technology disciplines dare to function. Viewed from the same perspective, Management Science/Technology programs are allied professional disciplines to Agriculture/Technology as they equally perform foundational

and complementary roles in realizing the mandate of the Specialized Universities. Therefore, Management Science/Technology Programmes mounted in the SFUs in Nigeria perform identical functions as the other allied disciplines and should accordingly be treated and run in the same way as the other allied disciplines by allowing them to continue to develop and offer academic and professional programmes leading to the award of diplomas, first degrees, post-graduate research and higher degrees in their respective programmes in the same way that the core disciplines in agriculture/technology disciplines are functioning without insinuations of breach of legal mandate.

Approval for the Establishment and Supervision of Management Science/Technology Programmes by Government and Professional Bodies in Nigeria.

Management Science/Technology Programmes mounted in the SFUs in Nigeria must be described as something other than unauthorized. Appropriate Federal Government agencies approved the authority for their establishment. The academic programs have continued to enjoy official confirmation of their legitimacy through the supervisory control, resource assessment, and accreditation of the National Universities Commission (NUC) alongside core agricultural and other allied professional disciplines in SFUs both at the undergraduate and Post-graduate levels. Also, Management Science/Technology programsenjoy full professional recognition, mentorship, monitoring, accreditation, and support of their various professional bodies. These are eloquent testimonies of the high academic and professional standards being offered/adopted in the programs. These professional bodies have undertaken and made massive human, material, and infrastructural investments in the course of advancing high academic and professional standards in the Universities. This is particularly impressive since it has become apparent that funding for University education can no longer be left in the hands of the government alone. Of particular interest are the donations of Ultra Modern Lecture Theatres, Computer systems, support personnel, and books to various Colleges of Management Sciences and Schools of Management technology by the Institute of Chartered Accountants of Nigeria (ICAN), Chartered Institute of Logistics and Transport (CILT), Nigerian Ports Authority (NPA), Central Bank of Nigeria (CBN), Association of National Accountants of Nigeria (ANAN), Nigerian Maritime Authority (NIMASA), among others. Academic programmesthat have enjoyed this massive support from their professional bodies and other Government Agencies should not be delisted from the JAMB Brochure simply because they co-exist with core programmes in Agriculture and Technology in the specialized Federal Universities despite their established relevance to the mandates of these Institutions and the avalanche of evidence of global best practices by world-class Universities with identical mandates.

Best Practices in the Management of Academic Programmes of Specialized Universities across the World

Program diversity in running Specialized Universities (SUs) is an emerging innovation and global best practice that is making such Universities more attractive to international students and more qualified in the global ranking matrix. Hence, SUs across the world are fast changing to this model. The present restricted model in running SUs in Nigeria is imparting restricted skills to graduates relative to other SUs in jurisdictions outside Nigeria. By adopting dynamism and curriculum innovation that reflect the changing needs of the public, specialized Universities in different parts of the world are making global Ranking headlines in their allied disciplines.

There is an urgent need to continue to align academic programmes offered in specialized Federal Universities in Nigeria with global trends by adopting a diversified educational model that offers complementary benefits to a variety of disciplines. Hanover Research (2015) provides expert discussions to show that programme diversity has become entrenched as an essential deliverable quality attribute for best practices in global education. The study noted that the diversified educational model provides frameworks for students who pass through such educational institutions to develop competencies that are globally relevant. This largely explains why many world-class specialized Universities in the USA, China, Brazil, Australia, Russia, India, Pakistan, Indonesia, Singapore, Hong Kong, Bulgaria, Kenya, Ghana, and other countries in Africa have abandoned the restrictive and conservative approach in implementing the mandates of SUs and now accommodate degree programmes in Education, Law, Humanities and Social Sciences, Medicine and Medical Sciences, Management Sciences, and other areas, to enable the Institutions to optimize the advantages of the value chain in the management of higher education. An extract from the academic Brochures of twenty-four (24) world-class specialized Universities in different countries is shown in Appendix 1. The breakdown indicates that the global trend is to accommodate some

strategic conventional University programs among the disciplines offered by such institutions.In the Appendix, the academic programmes mounted by five world-class specialized Universities are worthy of note – the Florida Agricultural and Mechanical University in the USA (1a), North Carolina Agricultural and Technical State University (1c), the Massachusetts Institute of Technology in the USA (1d), the Jomo Kenyatta University of Agriculture and Technology in Kenya (5m), and the Nanyang Technological University in Singapore (8r).

Florida Agricultural and Mechanical University was established in 1887. The University has a School of Business and Industry that offers degree programs in Accounting, Business Administration, Human Resources Management, and Economics, among other Management Science disciplines. In 2010, the University revised its academic curricula in response to global trends. It introduced a Minor (a Certificate Course) in Business Administration for Non-Business Majors(Florida Agricultural and Mechanical University Website). Thus, students majoring in disciplines domiciled in other Colleges/Schools/Divisions of the University outside the School of Business and Industry were compulsorily required to complete specified courses in Financial Accounting Principles, Principles of Marketing, Principles of Management, Corporation Finance, and any other six (6) hours of additional upper-level business courses for which the student has interest/aptitude. The revision was targeted at giving programs in agriculture and technology the robustness and competitive global business drive needed to compete in and contribute to today's global society successfully.

In the same vein, North Carolina Agricultural and Technical State University is a top-flight research University, the most extensive land-grand doctoral research University, and recognized for excellence in Science, Technology, Engineering, and Mathematics (STEM) education. The University was established in 1891, and 1968, the University expanded its academic programs to offer various degree programs in its Colleges of Education and Engineering. To give the programs the desired business drive, the University added a College of Business and Economics to existing programs in 1970. In 2016, the University further responded to global trends. It established three new Colleges – College of Arts, Humanities and Social Sciences, College of Health and Human Sciences, and College of Science and Technology (North Carolina Agricultural and Technical State University Website). These dynamic and positive responses to global standards derived from long-standing experience (since 1891) in managing specialized Universities provide templates for regulators of tertiary institutions in Nigeria to emulate and fully adopt.

Again, the Massachusetts Institute of Technology (MIT) in the US was established in 1861 and stands out as a model for Universities of Technology in the world. The Institute is ranked No.1 in the world according to QS World University Rankings 2020. It is popular for its research and development activities and thus provides a template for universities of technology globally. This world-class Institution of higher learning awards graduate and undergraduate degrees in Management Science and Management Technology disciplines and houses many degree programs in its Schools of Humanities, Arts, and Social Sciences. Of particular interest is its programme ranking in non-engineering fields. The ranking by Times Higher Education (THE) 2020 placed the Institute as No. 1 in Business and Economics, while QS 2020 ranked the Institute as No.2 in Accounting and Finance, No.3 in Global MBA, and No.4 in Business and Management Studies in the world (Massachusetts Institute of Technology Website). By its over 150 years of experience in running a specialized tertiary institution with a diversified model in mounting academic programmes, this world-class Institute of Technology has demonstrated that joining Management Science programmes to their core mandate area has substantial positive tradeoffs on the quality of graduates and increased their visibility for the high global ranking enjoyed by the Institute.

The Jomo Kenyatta University of Agriculture and Technology, established in 1994 in Kenya, is a case in point in Africa. The University is among the 21% of Universities in the world, ranking 4th among 68 Universities in Kenya as of 2022. It is famous for its global excellence in training, innovation, and entrepreneurship for development, and its medical students are making international headlines in Clinical Medicine across the world (Jomo Kenyatta University of Agriculture and Technology Website). These landmark achievements are recorded by a specialized University in Africa, which joined the rest of the world in adopting the diversified model in higher education by awarding degrees in various areas of Management Studies, Law, and Health Sciences in a specialized University of Agriculture and Technology. This specialized University in Africa (which is not as old as the last established specialized Federal University in Nigeria) has registered its name in the annals of quality Universities in the world and, thus, provides evidence that this emerging model for tertiary education administration is neither a matter of how long the University has existence nor is it restricted for application by Universities in advanced countries of the world.

Similarly, Nanyang Technological University was established in 1991 in Singapore following the government's decision to upgrade Nanyang Technological Institute to a specialized university status. Within the short period of its existence, the University has distinguished itself as a leader (and, in fact, No.1) in the world in the ranking of Young Universities for five consecutive years in the QS top 50 from 2015 to 2019. It was ranked 11th in the world and 3rd in Asia in the 2020 QS World University Rankings. The University not only awards degrees in its Schools of Business, Medicine, Social Sciences, and Education but has advanced into establishing Double Degree Programmes that join Engineering with various areas of Management Science and Management Technology to harness the linkage benefits associated with the value chain process. The University is famous as the National Institute of Education and a leading Research Centre in International Studies (Nanyang Technological University Website). Evidently, the University is even excelling more in its allied programs than in its core mandate programs. The fact is that by 2015 when the first two specialized Federal Universities of Technology and Federal Universities of Agriculture had spent 27 and 35 years, respectively from their founding dates, this young, innovative, and highly mobile specialized University (barely 24 years of acquiring the status of a University) had become globally visible, ranking No.1 for five consecutive years in the world and at which time (even up till date) nothing is known of any of the Nigerian's Specialized Federal Universities in global ranking landscape. The difference lies in the perception held and interpretations given to their mandates by regulators and managers of such institutions. Until regulators and operators/ management of SFUs in Nigeria begin to see things from a global perspective, with a mindset to adopting international best practices, the quality of academic outputs (our graduates, our research, our innovations, and indeed our institutional visibility and ranking) will continue to be odiously visible only in communities of internal Departmental, College, Senate, and Council meetings.

There is no doubt that the Diversified Education Model is the emerging model for a sustainable value chain approach in educational administration. This model, which many world-class Universities are increasingly adopting, can add value to the quality of graduates from such Universities and thus has justified the high ranking enjoyed by the Institutions among other Universities in the world. There is, therefore, an urgent need for all specialized Federal Universities in Nigeria to be allowed to continue to align with global trends by adopting a comprehensive and diversified educational model that offers complementary benefits to a variety of disciplines.

Domestication of Financial Reporting Standards for Agriculture and Modern Financial Reporting Packages for Agricultural Activities in Management Science Disciplines

The whole world is increasingly becoming a GLOBAL VILLAGE, with Nigeria being one of the 21st Century emerging market economies that comprehensively adopted the various global standards in many areas, including International Financial Reporting Standards (IFRS) since 2012. These standards contain financial reporting standards in Agriculture, such as IAS 41 on *Agriculture*, IAS 2 on *Inventories*, IAS 20 on *Accounting for Government Grants and Disclosure of Government Assistance*, and IFRS 15 on *Fair Value Measurement*. These standards provide guidelines for accounting and reporting on agricultural activities and operations of entities of all sizes. Highlighting the need for the acquisition of knowledge offered in programmes within Management Sciences by persons engaged in agricultural activities, Stergios*et al.* (2010) investigated the gap between accounting practices and the role of accounting information in the agricultural sector in the context of *IAS 41 on Agriculture*. They concluded that IAS 41 provides a solid conceptual framework in agricultural accounting practice and an informative framework for farm development. Inthe Nigerian environment, where a plethora of credit facilities and grants are extended to agriculture, *IAS 20 on Accounting for Government Grants and Disclosure of Government Assistance* also gives globally accepted guidelines for handling such facilities for agricultural operations. Ademola *et al.* (2014), while evaluating various educational policy implementations and students' enrolment into tertiary institutions in Nigeria, stressed the need for the government to begin the process of reviewing the curriculum offered by Universities in the country to meet industry standards and to explore other models being adopted in developed countries in other to be globally relevant. It is, therefore, essential that these emerging areas of accounting and financial reporting standards are added to the curricula of all programs in agriculture and sufficiently taught to all students pursuing agricultural programs in all Universities in Nigeria, be they in specialized or conventional Universities. By so doing, Nigeria will be reflecting the real essence of her three-phased full adoption of International Financial Reporting Standards (IFRS) in tertiary education curricula in Agriculture and thus position the sector to play critical roles in driving national development.

Besides, a number of Accounting and Financial Reporting packages for Agricultural activities that evolved from management science areas exist. Such packages include *Agrivi Farm Management, Tally ERP 9, Easy Farm Accounting Software, Quick Book Farm Accounting,* and *Centre Point Accounting for Agriculture*. These modern financial reporting packages/tools for bankrolling agricultural activities are domesticated in Management Science disciplines. To operate agricultural programs in present-day society without exposure to these modern tools is to crave antiquity. Policies that allow for innovations to enable agricultural education curricula to accommodate these critical packages will obviously strengthen linkage benefits among agricultural education, agricultural practice, and Management Science disciplines in Federal Universities of Agriculture/Technology. Therefore, Federal Universities of Agriculture/Technology in Nigeria cannot safely do without teaching and research opportunities in these emerging areas provided by Management Science programmes, and thus, should be harnessed for balanced knowledge and enrichment of not only core programmes in Agriculture/Technology but also for the benefits of other allied professional disciplines in SUs in the country.

Uniqueness of Management Science and Management Technology Programmesin Specialized Federal Universities (SFUs) in Nigeria

Management Science and Management Technology programs run in SFUs in Nigeria are uniquely structured with richer academic content than is provided for such programs in conventional Universities. Consequently, Agricultural programs in FUAs offer teaching and research services to Management Science programs in a good number of courses, and vice versa. Thus, the academic contents of the management science curricula offered by FUAs in Nigeria are not only different but offer more significant national socio-economic advantages than those programs offered in conventional universities. Management Science programmes in the FUAs, besides meeting the required NUC BMAS in these areas, provide additional opportunities for their students to take compulsory courses in Agriculture to further equip them with requisite skills for meeting the mandate of the FUAs and in line with national aspirations in Agriculture. For instance, Science and Agricultural programmes in FUAs offer teaching and research services to Management Science programmes in many courses, including Farm practice, Entrepreneurship Skills in Agriculture, and Practicum, which involve raising and maintaining mini agribusiness ventures in animal husbandry (poultry, piggery, etc.), Fisheries/Aquaculture, Food processing, packaging and preservation; Bakery, weaving, soap/detergent making, etc. As a result, students of Management Science disciplines in FUA acquire substantial skills in agriculture upon graduation, and some of the graduates establish and successfully operate small-scale agro-based businesses using skills acquired during the period of their University education. These unique exposures not only encourage the advancement of learning and promote opportunities for acquiring higher education in agriculture, but they equally foster the practical application of results of training and research in agriculture and allied disciplines to a vast number of persons (Management Science Students) in line with the core mandate of FUAs as expressed in S.2(3)(a), (b) & (g) of FUA Act, 2004 (as amended).Conventional Universities in Nigeria need to expose students in their Management Science programmes to the various training opportunities in Agriculture.

Conversely, Management Science disciplines extend teaching and research services to some programmes in agriculture and other allied disciplines in a more significant number of business courses (COLMAS Position Paper, 2018). This is a deliberate strategy for fostering collaboration and integration of training and research in agriculture with programmes in Management Sciences. The strategy is targeted at driving agriculture as a business for the needed transformation and development of agriculture in Nigeria, which is consistent with S.2 (3)(f) of the FUA Act, 2004 (as amended).

The existing symbiotic relationship between core agricultural programs and management science programs in FUAs not only makes these management science programs unique and distinct from those offered in conventional universities but also better positions the FUAs to realize their core mandate. In the interface, essential linkages and, indeed, value chains are created to discretely build blocks of competitive advantage for transforming agriculture from its long heritage of peasantry practices to a technology-driven and scientific management level with modern business orientation and skills.

Running diversified / inter-disciplinary educational models of programs in FUAs creates the much-needed platform for producing graduates with adequate entrepreneurial skills to be job creators rather than job seekers. There is a need to sustain the existing mutually beneficial relationship between core Agricultural programs and Management Science programs in the three FUAs to continue to offer complementary teaching and research opportunities among the various disciplines. Besides, the co-existence of Management Science programs with core Agricultural programs in the same University does not obstruct

but re-enforces each other, just like the agricultural sector exists with other sectors in the same economic environment in the larger Nigerian economy.

This type of synergy equally exists between Management Technology programmes and core programmes in Technology in the specialized Federal Universities of Technology and, thus, provides sufficient wisdom for government to sustain the existing mutually beneficial relationship between core programmes in Agriculture and Technology and the allied professional disciplines in Management Science and Management Technology in SFUs, and further strengthen existingcomplementary teaching and research opportunities created and offered among the various disciplines.Indeed, the co-existence of the programs in SUs is similar to the pursuit of the goals of traditional programs in Agriculture and Technology. However, the Management Science programs provide many more benefits through the provision of more profound program content knowledge across course areas for better outcomes – integrating experiential management science skills into learning processes in all other programs in the SUs. To delist such programs from the list of disciplines offered by SFUs will gradually frustrate the capacity of the universities to deliver their core mandates fully.

Model of Symbiotic Co-existence of Agricultural Sector with Other Economic Sectors in an Economy.

Academic programs in SUs should mirror the model of symbiotic and inseparable co-existence of economic sectors in every economy. The component sectors in an economy (such as agriculture, financial services, manufacturing, information communication technology, oil and gas, etc.) co-exist inseparably for mutual support in the same economic environment. The sectors are mutually dependent and reinforce each other's activities to achieve the desired collective growth of the economic system. This model of symbiotic co-existence between the agricultural sector and each of the different economic sectors in the economy provides a template for all sub-systems/sectors, including the interface in agricultural education. Agricultural activities can only be safely performed and strive in an economy with the mutual support and financial intermediation benefits offered by the financial service sector. In the same vein, agricultural education can only yield the desired quality of graduates with the complementary skills offered by management science and other allied professional disciplines. Core programs in agriculture and programs within management sciences are not competing. However, they are rather reinforcing each otherfor the mutually enriched outcomes needed to drive agriculture as a business.

Again, a unified regulatory framework and supervisory control for agricultural education in Nigeria cannot discretely be separated/allocated between two different ministries (Federal Ministry of Education and Federal Ministry of Agriculture and Rural Development) without dysfunctional outcomes. For instance, the Federal Ministry of Agriculture and Rural Development (FMA&RD) cannot control/supervise agricultural education in the three Federal Universities of Agriculture, while the Ministry of Education (FME) will oversee agricultural education of Faculties of Agriculture in conventional Universities in Nigeria; a condition that will sacrifice uniformity in quality and standard of agricultural education offered in the system. This is because Faculties of Agriculture in conventional Universities in Nigeria cannot be severed out and put under the supervisory control of the FMA&RD to enable academic activities/programs in Faculties of Agriculture in traditional Universities to be regulated and harmonized alongside agricultural programs offered in the three Federal Universities of Agriculture by this same Ministry. In the same vein, such supervisory function cannot be separated between the National Universities Commission (NUC), a new Commission for Universities of Agriculture (for FUA), and yet another new Commission for Universities of Technology (FUT). This kind of advocacy will undoubtedly create confusion, if not damage, the quality of the educational system, as every group of specialized universities (Agriculture, Technology, Defense, etc.) will have its own Commission to perform such functions that the NUC is credibly carrying out. It will also breed confusion as to which Commission will be given responsibility for regulating academic activities of Faculties of Agriculture/Technology mounted in conventional Universities in Nigeria, thus raising a fundamental question as to whether or not core disciplines in Conventional Universities should be moved to their respective SUs to be coordinated/regulated by their respective Ministries and Commissions.

It should be underscored that a vast gulf exists between agricultural education and agricultural practice, and this should be harmonized for the sustainable administration of SUs in Nigeria. The Federal Ministry of Education and the NUC should regulate all educational matters in the Nigerian University system. At the same time, the FMA&RD should be concerned with providing the blueprint for agricultural practice and growth. Any policy that is intended to separate/sever agricultural /technology education from

exposures to skills offered within management science/technology disciplines will leave the graduates deficient in essential management science/technological skills needed for running agriculture as a business.

Negative Implications of Delisting Management Science and Management Technology Programmes from SFUs in Nigeria

Delisting Management Science/technology programs offered by specialized federal universities in Nigeria have adverse economic, educational, and social implications for the Nigerian education system and the economy. Averting such negative consequences is inevitable for a stable, balanced, and productive Nigerian economy and, thus, provides additional justifications for relisting management science/technology programs in FUs in Nigeria. The adverse consequences to be averted by allowing management science/technology programmes to co-exist with core disciplines in SUs include:

a) Delisted management science programmes have aggravated the existing inequity in the distribution of Federal Tertiary Institutions (including conventional Universities) among States in Nigeria. Already, the distribution of Federal Tertiary Institutions in Nigeria needs to reflect the Federal character principle, which all sections of the country are clamoring for. The seven (7) States where Specialized Federal Universities are located in Nigeria(i.e., Abia, Benue, Delta, Imo, Niger, Ogun, and Ondo) have no conventional University to offer management science programmes that should cater to the educational interest of candidates from their States who desire to pursue degree programmes in Management Science and Management Technology. Even the distribution of conventional Federal Universities among the six geo-political zones in Nigeria is not equitably distributed as some zones have 83% to 100% of the States in the zone with conventional Federal Universities while others have 60%. Some of the States (like Abia and Benue) with specialized Universities of Agriculture have no single Federal Polytechnic and Federal College of Education from where the indigenes could have access to higher education in diploma and national certificate programs within Management Science and Management Technology areas**(see Appendix 2)**. It is only fair and equitable that the adverse skewness is not further aggravated by delisting management science/technology programme soffered in the SFUs, as this action may create the impression that the policy is intended to retard the educational progress in the affected States and Zones.

b) Again, there is an increasing mismatch between the total number of eligible candidates seeking admissions and the available spaces in Nigerian Universities. The geometric increase in the number of admission seekers and decreasing proportions that are eventually offered admission are dangerous trends that the government should guide against. This becomes very critical against the backdrop of the increasing rate of insecurity and youth banditry in Nigeria. The Joint Admissions and Matriculations Board admission statistics reveal that 1.2 million, 1.3 million, and 1.7 million candidates registered for the Unified Tertiary Matriculation Examinations in 2015, 2016, and 2017, respectively, and only a small proportion of the eligible candidates were offered admission (Jayeola, 2017). He also reported that of the number of candidates applying for admission every year in Nigeria, only about 5.2% to 15.3% get admitted every year, meaning that about 84.7% to 94.8 of the candidates seeking admissions every year never get admitted into Nigerian Universities. The situation has continued to worsen in subsequent years with the delisting of these Management Science/Technology programs in SFUs, thereby increasing the number of young boys and girls roaming the streets as ready tools for the devil to use. In the process, the career choices of many youth are thwarted. There is, therefore, no doubt that the observable mismatch in the demand and supply statistics for higher education in Nigeria is bound to have a profound negative impact on the teeming youths seeking University admissions into the delisted Management science/Technology programmes in SFUs, more so as many of such students are indigent with a poor financial background and cannot meet up with high school fees charged in Private and State Universities.

c) Furthermore, lots of investments in both material and human resources have been made by governments, Agencies, Institutions, Professional Bodies, host Communities, and private individuals for running Management Sciences and Management Technology programs in SFUs. These investments will be wasted without achieving the noble objectives for which they were made. As Jayeola (2017) reported, delisting these disciplines from SFUs in Nigeria will be tantamount to a waste of scarce resources and a disincentive to the professional bodies and institutions that intervened in the problem of insufficient funding of the Universities in Nigeria.

d) Delisting Management Sciences and Management Technology programs in SFUs in Nigeria equally have global implications. Restrictive and unnecessary conservative perceptions of mandates of Nigerian universities (including SUs) make their programs unattractive in the international education market. According to UNESCO, over 60,000 of Nigeria's brightest students - equivalent to 375 students for each of

our 160 Universities -choose to study abroad. Nothing is intrinsically wrong with Nigerians studying abroad except that the nation's Universities have failed to attract the equivalents in foreign students, thus leading to a "brain drain" rather than "brain exchange." Therefore, delisting programs in Management Sciences and Management Technology from SUs in Nigeria implies placing the institutions at odds with current global practices in tertiary education administration and, thus, increasing their unattractiveness to international students, which is part of the considerations in the global ranking for Universities in the world.

e) Delisting Management Science programs perpetually de-market SFUs in Nigeria because of its adverse effects on the quality of academic outputs of the SFUs (graduates, research, innovations, and indeed our institutional visibility and ranking). Delisting the programs makes SFUs operate below global best standards in the management of specialized universities, and this places them at odds with current international practices in tertiary education administration. This explains the existing persistent poor rating of SFUs in Nigeria for Global Ranking and their unattractiveness to international students in the global education market.

f) The delisted management Science/Technology programmes have resulted in a severe reduction in Internally Generated Revenue (IGR) of SFUs in Nigeria at a time when funding of such educational institutions is a crucial success factor. This is reflected in the low level of operational services and the quality of teaching and learning activities offered.

REAL CHALLENGES OF SPECIALIZED FEDERAL UNIVERSITIES IN NIGERIA

There is no doubt that justifications for the establishment of specialized Federal Universities in Nigeria were based on genuine intentions to advance the national interest. At that time, Nigeria was (and still is) grappling with a dearth of knowledgeable manpower in the specialized fields of agriculture and technology, and this informed the need to encourage specialized university education in these fields. So, the Universities developed and offered core programs in Agriculture and Technology for more than ten years before exploring the need to expand their programs to include allied professional disciplines in Management Sciences and Management Technology. Before this expansion, the specialized Federal Universities suffered from low visibility (national and global), no ranking (regional, continental, and international), and very low patronage in most of their core programs during admissions, with some programs having less than five intending applicants in some years. Consequently, their graduation statistics remained abysmally low, with the apparent inability to resolve the dearth of knowledgeable manpower in the specialized fields/areas for which they were established. The implication is that the problems of specialized Federal Universities in Nigeria predate the establishment of allied professional disciplines in Management Sciences/Technology and do not lie in the co-existence of the core programs with the allied professional disciplines.

There are apparent critical challenges that negatively affect the capacity of SFUs to achieve their mandate, and these include:

1. There is the perennial problem of poor patronage and low subscription to the core programs, particularly in Agriculture, which should give government and education administrators great concern. This problem is partly attributable to the general lack of incentives for graduates from agricultural programs. There is a scarcity of lucrative job opportunities in Nigeria, and funding for self-engagement in Agricultural businesses is not readily available.

2. It hardly needs to be emphasized that adequate funding and the application of modern management skills hold the key to the success of every establishment, so it is to SUs and agricultural enterprises. Ademola *et al.* (2014) also identified poor funding as the obvious foundation of all the other problems in educational institutions. By the United Nations standards, 27% of a country's budget should go into the educational sector. However, in Nigeria, a meager 7.04% was allotted to education in 2018, of which basic education is inclusive. This percentage has remained stagnant since 2009, when it was 7.25% (Ademola *et. al.*, 2014).
3. Lack of requisite financial management skills, knowledge, and competencies by graduates of core agricultural programs. Few graduates of agriculture who invested in agribusiness enterprises suffered substantial losses, and their businesses got distressed and collapsed because the operators were not sufficiently schooled in the financial management skills needed to run such business ventures. Literature is replete with evidence to show that lack of knowledge in management science disciplines is a potent danger to successful enterprise in agriculture. This danger could well be averted by allowing disciplines in agriculture to be enriched with contents showcased in the various programs in Management Sciences. For

instance, Sharma (2012) reported that proper financial accounting records are not maintained in agriculture and proposed that attention should be given to proper accounting in agriculture to avert failure in agribusiness ventures. The paper also associated a lack of proper farm management and knowledge of accounting systems with low productivity in agriculture. In a study by Joshi (2019), insufficient significance given to accounting information systems in agriculture was identified as a significant problem that leads to failures in agricultural enterprises. The author advised a change of orientation, concluding that poor or weak knowledge of business management and accounting skills may lead to miscalculations in agricultural enterprises. Sayekti *et al.* (2018) equally reported that inadequate disclosure and low compliance to fair value measurement rules on biological assets affect the reliability and relevance of financial information regarding biological assets of agricultural enterprises, stressing the need for managers of agribusiness ventures to have a balanced knowledge of accounting and other areas of financial management. Also, Karakaya (2009) provided a historical overview of accounting applications in agricultural activities in Turkey and concluded that agricultural activities cannot develop without proper application of accounting practices. Such application practices should be imparted at secondary and tertiary levels to properly orient and equip graduates in agricultural programs with skills to drive agriculture as a business successfully. Based on this empirical evidence from prior studies, it is sufficient to conclude that training in any discipline in agriculture without enough exposure to the diverse areas of knowledge in Management Sciences can hardly produce self-sufficient and highly skilled graduates with the capacity to drive agricultural activities beyond peasantry practices.

4. Again, job opportunities offered to Agricultural Science teachers at the primary and secondary school levels have virtually lost their attractiveness. Teachers in this area at the primary and secondary school levels find their interest in making a living out of their career trapped because the government had long discontinued the payment of allowances previously meant for teachers in the area of Science and Agriculture. Little or no incentives now exist for teachers at these levels, and this has led to low interest and desire to make careers in Agriculture, thereby widening the manpower gap in this area.
5. At the secondary and tertiary levels, there are also problems of poor funding and irregular and untimely release of special funds for developing agricultural education and practice. Needed equipment for practical and other technical facilities to establish commercial farms for the purpose of providing optimal training for students is generally lacking at both secondary and tertiary levels. Hence, only very few admissions seekers into tertiary institutions could venture into programs that do not readily offer high career prospects after spending the same or even more extended period of time and more financial resources to complete such programs compared to other programs with brighter future career opportunities.
6. Also, poor funding is seriously stifling research and innovations in SFUs in Nigeria. In FUA, this has stifled genuine efforts into research for high-yielding crops and animal breeding, no inventions to enhance soil fertility, and agricultural practices have largely remained rudimentary and peasantry. Thus, the specialized Universities of Agriculture appear handicapped in generating distinctive innovations as supposed centers of excellence in Agriculture in their many years of existence before allied professional disciplines in Management Science/Technology came on board. Thus, the manpower gaps in Agriculture were instead widening across all levels of education and related institutions with every aging or retiring personnel in the area. It became obvious that hitherto targeted centers of excellence must be refocused, transformed, and rebranded with a drive to shower up the quality and standard of outputs and graduates if the core mandate must be realized.

Across the world, this new mindset and philosophy have gained acceptance, and specialized Universities have shifted away from restrictive and conservative perceptions of pursuing the mandates of specialized Universities to a diversified mode in the administration of such institutions.

CONCLUSIONS

The paper is a critical evaluation of the Nigerian Government's policy directives on the relevance of Management Science/Technology programmes as allied professional disciplines in specialized Universities in Nigeria. Through a profound interpretation of the Object Clause of the Acts that established Federal Universities of Agriculture and Federal Universities of Technology in Nigeria, the study provides justifications for the establishment of Management Science/Technology programmes as allied professional disciplines in SUs in Nigeria based on established consistency and alignment with their legal mandates; and drawing insights from global best practices, and the model of symbiotic and inseparable co-existence of agricultural and technology sectors with other economic sectors in every economy, among other supporting evidence. The paper highlighted the negative implications of delisting management

Science/Technology programs from SFUs in Nigeria and outlined the real challenges facing SUs in Nigeria to isolate areas that require urgent government policy responses. Indeed, the diversified educational model is where the rest of the world is going, and Nigeria cannot afford to take the risk of living in the past. Therefore, any tertiary institution of Agriculture and Technology that is operated as an island in today's world characterized by a multi-disciplinary approach in dealing with socio-economic challenges that face nations will most likely be trapped into oblivion of its primitive past and be abandoned as a valueless relic of our time.

On the basis of the above expository, the paper makes the following specific recommendations:

The Federal Government and regulators of tertiary educational institutions in Nigeria should revisit the existing restrictive and conservative policy and approach in implementing the mandate of SUs in Nigerian with a view to optimizing the advantages of a diversified educational model in the administration of SUs to ensure that the nation's graduates are both specialized and well-rounded in their preparedness for contemporary challenges. This educational model integrates various disciplines, promoting interdisciplinary learning and broader perspectives with highly enriched outcomes gained by offering students a well-rounded education that ensures that they are not just experts in one field but also have a foundational understanding of other disciplines for a more comprehensive worldview.

The Federal Government should redirect the relevant agencies in education (the Federal Ministry of Education, the Federal Ministry of Agriculture and Rural Development, the National Universities Commission, and the Joint Admissions and Matriculations Board) to re-enlist all delisted Management Science/Technology and other allied professional disciplines back into the programmes offered by SUs in Nigeria as they offer foundational and complementary teaching and research opportunities for all programmes mounted in SUs to enhance their capacity to realize their legal mandate. Given the expected new government directive, the Joint Admissions and Matriculations Board (JAMB) will be able to relist Management Science/Technologyprogrammes on its portal/brochure to enable the Universities to offer and award diplomas, degrees and higher degrees in Management Science Disciplines as previously existed and in consonance with both the legal mandate and global best practices.

The Federal Government should take the issue of funding for education more seriously and manifest its acclaimed preferences for Agriculture and Technology by allocating substantial funds for the advancement of education in these critical areas. More incentives should be given to teachers and lecturers in Science, Agriculture, and Technology to stimulate their interests, desires, and commitments and thus encourage the younger generation towards making careers in these areas. Government can make the study of programs in Agriculture and Technology in the SFUs free or, at least, heavily subsidized to attract admissions into the programs and help build capacity for the required manpower in these areas.

Regulators and administrators of tertiary education in Nigeria should review the academic curricula of disciplines in the University system to be in line with global best practices. Curriculum innovation is critical in reflecting emerging educational needs in every dynamic society. The need to promote synergy among programs offered in SUs requires SUs to take advantage of the newly introduced CCMAS by NUC to engender necessary curriculum innovations by introducing a mandatory minors (Certificate courses) in Business Administration for all non-business majors. This innovative programme will require students majoring in disciplines that are domiciled in other Colleges of the University outside any of the programmes in Management Sciences/Technology to compulsorily complete specified courses in Accounting, Marketing, Management, Finance, and any other additional (elective) upper-level business courses for which the students may have interest/aptitude. Such curriculum innovations involve introducing Double Degree Programmes that combine specified business areas with specified programmes in agriculture/technology. Such curriculum innovation could be widened to promote synergy among most programmes offered in SUs. Theseinnovations will give the programmes offered in SUs the robustness and competitive global business drive needed to compete in and contribute to today's global society successfully. Nigeria's current posture of relegating herself to the background in the management of education should be changed by joining other SUs in the world to reflect dynamism in tertiary education curricula.

Regulators of tertiary education in Nigeria should promote synergy in program contents in SUs (Federal, State, and Private) by broadening the knowledge areas and avoiding wastes in human, material, and investments in infrastructure. This approach in educational administration enhances the value chain process in the scheme of academic pedigree by simultaneously improving the quality of their academic outputs and reputation for excellence in global ranking among Universities in the World.

A diversified and comprehensive educational model should be adopted by the Nigerian Government in interpreting the mandate of SFUs by allowing Management Science/ Technology programs to co-exist as allied professional disciplines in line with global best practices.

Again, operating the diversified and comprehensive educational model in SFUs will resolve the existing inequity and lopsided State distributions of conventional Federal Universities in Nigeria, which is presently skewed against the States in which the SFUs are located with no conventional Federal University to offer Management Science programs.

Federal, State, and Private governments should avoid waste in human, material, and investments in infrastructure. This approach in educational administration will enhance the value chain process in the scheme of academic pedigree. The interface of academic programs in Federal Universities of Agriculture, in particular, is modeled towards promoting essential linkages between core programs in Agriculture and those in the allied disciplines of Management Sciences. In the process, value chains are created to discretely build blocks of competitive advantage for transforming agriculture from its peasantry level to a technology-driven and scientific management level with a modern business orientation.

Finally, it should be noted that the fundamental problems of Nigeria's educational system are propelled and escalated by long periods of neglect and underfunding for educational institutions in Nigeria, particularly in the area of Agriculture and Technology. Consequently, proprietors, regulators, and managers of SFUs should address these problems rather than hide under the cloak of breach of the mandate by the co-existence of other allied professional programmes in SFUs; an erroneous conceptual model which progressive and highly rated world-class specialized Universities have long jettisoned and totally abandoned in other to embrace global best practices in the management of specialized tertiary institutions.

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Appendix 1:List of Selected World-Class Specialized Universities Running Management Science and Management Technology Programmes

	COUNTRY	**NAME OF UNIVERSITY**	**ALLIEDPROGRAMMES OFFERED**
1.	USA	a) Florida Agricultural & Mechanical University (1887).	School of Business & Industry offer B.Sc. degrees in Accounting, Economics, Human Resources Management, Business Administration, and Professional MBA, with a Minor in Business Administration for Non-Business Majors.
		b) Alabama Agricultural and Mechanical University (1875)	College of Business & Public Affairs College of Education, Humanities &Behavioral Sciences. College of Engineering Technology & Physical Sciences
		c) North Carolina Agricultural and Technical State University, Greensboro (1891)	College of Business &Econs (1970) College of Education (1968) College of Engineering (1968) College of Arts, Humanities & Social Sciences (2016) Coll. of Health & Human Scs. (2016) College of Science &Techn. (2016)
		d) Massachusetts Institute of Technology	Awards graduate undergraduate degrees in Management Sciences, including Supply Chain Management, Finance, & Entrepreneurship. School of Humanities, Arts & Social Sciences offers degree programs in History, Political Science, Economics, Media Arts, etc
		e) California Institute of Technology	Schools of Humanities School of Social Sciences. Awards for undergraduate & graduate degrees in Business, Economics, Management, & Political Science.

2. China - f) South China Agric. University (1909) - College of Economics & Mgt.
College of Public Mgt
College of Humanities & Law
College of Arts
College of Continuing Education
College of International Edu.
g) Yunnan Agricultural University (1938) School of Economics & Trade
School of Engineering
School of Physical Education
School of Humanities & Social Science.
School of Continuing Education.

h) South China University of Technology School of Business Administration,
School of Politics & Public Administration,
School of Economics & Trade,
School of Foreign Languages,
School of Journalism & Communication,
School of Art, and
School of Law.

i) Gansu Agricultural University (1946) Runs degree programmes in Economics, Finance, Marketing, Financial Mgt, Law, Management of Human Resources.

3. Pakistan j) The University of Agriculture, Peshawar (1957) College of Business &Mgt Sciences

k) Lasbela University of Agriculture Water & Marine Science (2005) Faculty of Social Sciences
Faculty of Languages & Linguistics

4. Russia l) Kuban State Agrarian University (1918) offers degree programs in Economics, Financial Accounting, Finance & Credit, Engineering, Taxes & Taxation, Administration, and Law.

5. Kenya m) Jomo Kenyatta University of Agriculture & Technology, Nairobi (1994) College of Human Resources & Dev.
College of Engineering & Tech.
College of Health Sciences
, School of Architecture & Building Sc
School of Law
, School of Computing & Info Tech.

6. India n) Kerala Agricultural University (1971) College of Co-operation, Banking & Management.

o) GB Pant University of Agriculture & Technology (1960) College of Agribusiness Mgt.
College of Basic Sci. & Humanities

p) Indian Institute of Technology, Madras School of Humanities & Social Sciences,
School of Management Studies.
Awards Masters of Business Administration (MBA).

7. Indonesia q) Bogor Agricultural University (1963) Faculty of Economics &
Management.

8. Singapore r) Nanyang Technological University Awards degrees in:
(1991) School of Humanities (History,
Philosophy, Linguistics &
Multilingual Studies).
School of Social Sciences
(Economics, Psychology,
Public Policy & Global Affairs,
Sociology) , School of Medicine,
School of Education
(Arts Education and
Science Education), School of
Business (Accountancy, Business
Management, Finance).
Double
Degree Programmes in
Accountancy & Business, Business & Computing, Business & Computer Engineering,
Aerospace Engineering & Economics,
Bioengineering & Economics,
Material Engineering & Economics.

9. Hong Kong s) Hong Kong University of School of Business & Management
Science & Technology (awarding degrees in
Information Systems,
Marketing, Accounting, Economics, Finance,
& Business Management).
School of Science.
School of Humanities & Social Sciences.

10. Ghana t) Sunyani Technical University Awards degrees in Accountancy,
Economics,Finance,
Business, &Community
Development.

11. Bulgaria u)Technical University of Gabrovo (1964 Awards degrees in
Management, Marketing;
Economics;
Social Sciences;
Industrial Management;
Applied Informatics; Foreign
Languages; Physical
Education and
Sports.

12. Brazil v) Federal University of Technology, Awards degrees in
Parana (1892)
Communication:Journalism, Marketing
and Public Relations,
Accounting, Sociology,
Anthropology, Political Science,
History,
Language and Literature,
Education, Tourism,
Geography, Philosophy,
Management, Physical Education.
e.t.c.

13. Australia w) Curtin University of Technology, Sydney.Awards degrees in Business

Management, Economics,
Finance, Marketing, and
Law.

x) University of Technology, Sydney (1870) Awards degrees in Business fields
(Accounting, Economics,
Finance, Marketing,
Management) and in
Law, Information
Technology, Global Studies,
International Studies,
Education, Library and
Information Studies,
and Journalism

Appendix 2: Summary of the Distribution of Federal Tertiary Institutions in Nigeria by Geo-Political Zones

Geo-Political Zone	Conventional Federal Universities (FCU)	Specialized Federal Universities	Other Federal Tertiary Institutions	Total Federal Tertiary Institutions	State Statistics	
					No of States	Proportion with FCU
North-Central	5	2	9	16	6+FCT	71.4%
North-West	7	1	12	20	7	**100%**
North-East	6	1	8	15	6	100%
South-West	5	2	10	17	6	83.33%
South-South	5	1	6	12	6	83.33%
South-East	**3**	**2**	8	13	5	**60%**
TOTAL	31	9	53	93	36+FCT	

Details are as stated in Appendix 3 below

Appendix 3: Distribution of Federal Tertiary Institutions by States in Nigeria

Serial Number		STATE & NAMES OF FEDERAL TERTIARY INSTITUTIONS	GEO-POLITICAL ZONE	STATUS OF UNIVERSITY
1	**FCT, ABUJA**			
	1	University of Abuja, Gwagwalada.	North Central	Conventional
2	**BENUE STATE**			
	1	University of Agriculture, Makurdi. (Established on January 1, 1988)	North-Central	Specialized
	2	Nigeria Army School of Military Engineering, Makurdi.	North-Central	
3	**KWARA STATE**			
	1	University of Ilorin	North Central	Conventional
	2	Federal Polytechnic, Offa.	North Central	
	3	Nigerian Army School of Education, Ilorin.	North Central	
4	**NASARAWA STATE**			
	1	Federal University of Lafia.	North Central	Conventional
	2	Federal Polytechnic, Nasarawa.	North Central	
5	**PLATEAU STATE**			
	1	University of Jos	North Central	Conventional

	2	Federal College of Education, Pankshin.	North Central	
6	**KOGI STATE**			
	1	Federal University, Lokoja.	North Central	Conventional
	2	Federal Polytechnic Ida.	North Central	
	3	Federal College of Education, Okene.	North Central	
7	**NIGER STATE**			
	1	Federal University of Technology, Minna. (Established in **1983)**	North-Central	Specialized
	2	Federal Polytechnic, Bida.	North-Central	
	3	Federal College of Education, Kontagora.	North-Central	
8	**KADUNA STATE**			
	1	Ahmadu Bello University, Zaria.	North West	Conventional
	2	Nigerian Defence Academy, Kaduna. (Established in 1964)	North West	Specialized
	3	Air Force Institute of Technology, Kaduna.	North West	
	4	Kaduna Polytechnic, Kaduna.	North West	
	5	Federal College of Education, Zaria.	North West	
9	**KANO STATE**			
	1	Bayero University, Kano.	North West	Conventional
	2	Nigeria Police Academy, Wudil.	North West	
	3	Federal College of Education. Kano.	North West	
	4	Federal College of Education Technical, Bichi.	North West	
10	**KEBBI STATE**			
	1	Federal University, BirninKebbi.	North West	Conventional
	2	Waziri Umaru Federal Polytechnic, BirninKebbi.	North West	
11	**SOKOTO STATE**			
	1	UsumanuDanfodiyo University, Sokoto.	North West	Conventional
	2	Shehu Shagari College of Education, Sokoto.	North West	
12	**KATSINA STATE**			
	1	Federal University, Dustsinma.	North West	Conventional
	2	Federal College of Education, Katsina.	North West	
13	**ZAMFARA STATE**			
	1	Federal University, Gasau.	North West	Conventional
	2	Federal Polytechnic, Namoda.	North West	
	3	Federal College of Education Technical, Gazau.	North West	
14	**JIGAWA STATE**			
	1	Federal University, Dutse.	North West	Conventional
	2	HussainiAdamu Federal Polytechnic, Kazaure.	North West	
15	**ADAMAWA STATE**			
	1	Federal University of Technology (Established in 1988) changed to MadibboAdama University of Technology, Yola. In October 1, 2011 and Bill signed in January 2021 as MadibboAdama University, Yola	North - East	Specialized now Conventional
	2	Federal Polytechnic, Mubi.	North - East	
	3	Federal College of Education, Yola.	North - East	
16	**BAUCHI STATE**			
	1	Abubakar Tafawa Belewa University, Bauchi.	North East	Conventional
	2	Federal Polytechnic, Bauchi.	North East	
17	**GOMBE STATE**			

	1	Federal University, Koshere.	North - East	Conventional
	2	Federal College of Education Technica,lGombe.	North - East	
18	**TARABA STATE**			
	1	Federal University, Wukari.	North East	Conventional
	2	Federal Polytechnic, Bali.	North East	
19	**BORNO STATE**			
	1	University of Maiduguri, Borno.	North East	Conventional
	2	Federal College of Freshwater Fisheries Technology, Maiduguri.	North East	
20	**YOBE STATE**			
	1	Federal University, Gashua.	North East	Conventional
	2	Federal Polytechnic, Damaturu.	North East	
	3	Federal College of Education Technical, Postiskun.	North East	
21	**EKITI STATE**			
	1	Federal University, Oye- Ekiti.	South - West	Conventional
	2	Federal Polytechnic, Ado-Ekiti.	South - West	
22	**ONDO STATE**			
	1	Federal University of Technology, Akure. (Established on January 1, 1988)	South-West	Specialized
	2	Adeyemi College of Education, Ondo.	South-West	
	3	Federal Polytechnic, Ile-Oluji.	South-West	
23	**LAGOS STATE**			
	1	University of Lagos, Akoka.	South-West	Conventional
	2	National Open University of Nigeria, Lagos	South-West	Conventional
	3	Yaba College of Technology, Yaba.	South-West	
	4	Federal College of Education Technical, Akoka.	South-West	
24	**OSUN STATE**			
	1	Obafemi Awolowo University, Ile-Ife.	South-West	Conventional
	2	Federal Polytechnic, Eded.	South-West	
25	**OYO STATE**			
	1	University of Ibadan, Ibadan.	South-West	Conventional
	2	Federal College of Animal Health and Production Technology, Ibadan.	South-West	
	3	Federal College of Education (Special), Oyo.	South-West	
26	**OGUN STATE**			
	1	Federal University of Agriculture, Abeokuta.	South-West	Specialized
	2	Federal Polytechnic, Ilaro.	South-West	
	3	Federal College of Education, Osiele-Abekuta.	South-West	
27	**AKWA-IBOM STATE**			
	1	University of Uyo, Uyo.	South - South	Conventional
	2	Federal Polytechnic, Ukana.	South - South	
28	**CROSS RIVERS STATE**			
	1	University of Calabar, Calabar.	South-South	Conventional
	2	Federal College of Education, Odbudu.	South-South	
29	**DELTA STATE**			
	1	Federal University of Petroleum Resources Effurum.	South-South	Specialized
	2	Federal College of Education, Asaba.	South-South	

30	**RIVERS STATE**			
	1	University of Port Harcourt, Port Harcourt.	South-South	Conventional
	2	Federal College of Education Technical, Omoku.	South-South	
31	**EDO STATE**			
	1	University of Benin, Benin	South-South	Conventional
	2	Auchi Polytechnic, Auchi.	South-South	
32	**BAYELSA STATE**			
	1	Federal University, Otuoke.	South-South	Conventional
	2	Federal Polytechnic, Ekowa.	South-South	
33	**EBONYI STATE**			
	1	Federal University, Ndifu-Alike.	South- East	Conventional
	2	Akanu-Ibiam Polytechnic, Uwana.	South - East	
	3	Federal College of Agriculture, Ishiagu.	South - East	
34	**ENUGU STATE**			
	1	University of Nigeria, Nsukka.	South-East	Conventional
	2	Federal School of Dental Technology and Therapy, Enugu.	South-East	
	3	Federal College of Education, Eha-Amufu.	South-East	
35	**IMO STATE**			
	1	Federal University of Technology, Owerri.	South-East	Specialized
	2	Federal Polytechnic, Nekede.	South-East	
	3	AlvanIkoku College of Education, Owerri.	South-East	
36	**ANAMBRA STATE**			
	1	NnamdiAzikiwe University, Awka.	South-East	Conventional
	2	Federal Polytechnic, Oko.	South-East	
	3	Federal College of Education, Umunze.	South-East	
37	**ABIA STATE**			
	1	Michael Okpara University Of Agriculture, Umudike. (Established on November 13, 1992)	South-East	Specialized

NEXUS BETWEEN INNOVATION, ENTREPRENEURSHIP AND AGRICULTURE

Edward Perekebina Agbai
School of Entrepreneurship, Emmanuel University, Raleigh, NC, USA
Corresponding author: edwardagbai@gmail.com

ABSTRACT
Innovation is essential for economic growth, and entrepreneurship is vital to commercializing innovation results. Today, innovation is gaining attention due to the increasing pressure of sustainable development and the need for researchers to examine the nexus between innovation, entrepreneurship, and agricultural business by incorporating sustainable value-creation practices in a hub. This study addresses the problem of what drives innovators to integrate sustainable agriculture into their entrepreneurial ventures. It aims to determine whether the value placed on innovations hub within an ecosystem affects the intention to establish sustainable businesses. The study is based on Schumpeter's classical theory that innovative food products are made of unconventional materials using the latest technologies, new methods of processing and storage, and creative marketing promotion tools. The primary objective was to collect and analyze secondary data from innovation hubs domiciled in universities in North America and how it affects the agricultural sector output of the areas covered. Two essential theoretical components of Schumpeterian classical entrepreneurship theories are distilled concerning entrepreneurship theory-building: (1) the distinction between entrepreneurship and leadership and management and (2) the ubiquity of entrepreneurship in all human endeavors. By identifying and examining the WHY and HOWs of the interface between innovation, entrepreneurship, and agricultural business, the hub can create an excellent intervention ground to rationalize resources and knowledge to develop agribusiness farming systems and sustainable value-creation practices. Therefore, insight into the determinants of sustainable entrepreneurship can be an essential step toward designing a practical and durable policy mechanism for implementing innovation hubs when developing entrepreneurial agriculture education programs.
Keywords: Agribusiness, economic growth, entrepreneurship, innovation hub, and Value Creation.

INTRODUCTION
In the tapestry of global development, the intersection of innovation, entrepreneurship, and agriculture has emerged as a critical nexus, offering profound implications for sustainable growth and resilience. This research explores the intricate relationships among innovation, entrepreneurship, and agriculture, delving into their synergies to unlock transformative potential within the agricultural sector. As the global community grapples with pressing challenges related to food security, environmental sustainability, and economic development, understanding the dynamic interplay of these three pillars becomes imperative. This introduction sets the stage for an in-depth investigation into the nexus between innovation, entrepreneurship, and agriculture. It seeks to unravel their intertwined dynamics and pathways for fostering a robust and sustainable agricultural landscape.
The evolution of global challenges, from climate change to population growth, places unprecedented demands on agricultural systems. In this context, innovation emerges as a linchpin capable of redefining traditional paradigms and introducing novel approaches that enhance efficiency, resilience, and sustainability in agriculture. Entrepreneurship acts as a catalyst, bridging the gap between innovative ideas and tangible solutions. It transforms the agricultural landscape by translating inventive concepts into practical applications, thereby driving economic growth, creating employment opportunities, and fostering a culture of adaptability within the sector.
Innovative entrepreneurship activities contribute to fostering a thriving market, which promotes the diversification of crops (Khan, 2015) and reduces their dependence on a single market, thereby increasing their incomes and business models (Grande *et al.*, 2011). Besides, in rural areas, innovative entrepreneurs in the agricultural sector can bring new technologies and practices to improve farm productivity and efficiency, leading to increased yields and profitability (Kharga *et al.*, 2021). Meanwhile, the farmers' entrepreneurial activities provide new jobs both on and off the farm, which is conducive to stemming rural migration (Kushalakshi & Raghurama, 2014) and driving the development of new business forms and new models such as digital countryside, sightseeing agriculture, and rural complex (Zhang *et al.*, 2018). This is beneficial to strengthening rural communities and sustaining rural livelihoods. Thereby, farmers'

innovative entrepreneurship can play a crucial role in improving the well-being of rural communities to a large extent. By contrast, some scholars have highlighted the adverse effects of farmers' entrepreneurship activities on the development of rural areas. For instance, excessive competition in the entrepreneurial process may negatively impact the development of local unestablished businesses and exacerbate the pressure on the local economic environment due to limited market access (Tsvetkova *et al*., 2017). In addition, it is worthwhile to note that agricultural entrepreneurship may also present a range of environmental issues and social challenges, such as soil degradation, the abandonment of farmland, water pollution, the waste of resources, the displacement of local communities, and other social conflicts (Patel & Chavda, 2013). Meanwhile, some rural entrepreneurship activities may hinder local technology progress and cause market volatility to some extent. That is, the innovative entrepreneur may heavily rely on technology, such as genetically modified seeds and digital technology, and this dependence may limit their flexibility and resilience in the face of changes in the market or environmental conditions.

This research acknowledges the pivotal roles that innovation and entrepreneurship play in shaping the future of agriculture. The interconnected dynamics between these two elements and their collective impact on the agricultural sector form the focal point of this study. By scrutinizing the nexus between innovation, entrepreneurship, and agriculture, this research aspires to contribute to academic scholarship and practical insights that can inform policy decisions, guide entrepreneurial endeavors, and pave the way for sustainable agricultural development. In the following sections, the study will unfold by providing a detailed background, articulating the problem statement, elucidating the research objectives, and presenting a thorough review of relevant literature. Through these steps, the research aims to offer a holistic understanding of the complex interdependencies that define the nexus between innovation, entrepreneurship, and agriculture.

Background of the Study

Agriculture, as a linchpin of economic stability and food security, confronts various challenges ranging from the impact of climate change to the uncertainties of fluctuating markets. Against this backdrop, innovation emerges as a linchpin, capable of reshaping traditional agricultural paradigms into adaptive, efficient, and sustainable models. Simultaneously, entrepreneurship is a catalyst, translating innovative ideas into tangible solutions. The marriage of innovation and entrepreneurship fosters economic growth and creates an environment conducive to agricultural development. Recognizing and understanding the interconnected dynamics of these elements is essential for unlocking their combined potential and ushering in holistic advancements in the agricultural sector.

Innovation is essential for economic growth, and entrepreneurship is vital to commercializing innovation results. Innovation hubs bring together R&D institutions (tech-enabled corporations, universities, and medical facilities), venture capital, incubators, and start-ups. Agric Innovations Hubs are to facilitate the mainstreaming of innovations in agriculture and contribute to the transformation of agri-food systems.

In the contemporary landscape of global challenges, agriculture stands as a linchpin, crucial for global food security, economic development, and environmental sustainability. The intricate web of challenges facing the agricultural sector, ranging from climate change impacts to the need for increased productivity, necessitates a dynamic approach. The confluence of innovation and entrepreneurship in agriculture has emerged as a promising avenue to address these challenges and unlock new possibilities for growth and sustainability.

Evolution of Agriculture and the Need for Innovation:

Agriculture has undergone significant transformations over the centuries, from traditional subsistence farming to highly mechanized and technologically driven systems. Despite these advancements, the sector grapples with multifaceted challenges, including the need to meet the growing global demand for food, adapt to changing climate conditions, and ensure the sustainable use of natural resources. Innovation in agriculture becomes imperative as a driving force to revolutionize practices, enhance productivity, and mitigate environmental impacts

The Role of Entrepreneurship in Agricultural Development:

Entrepreneurship is a dynamic catalyst for change in the agricultural landscape. Entrepreneurs in this sector introduce innovative solutions, create economic opportunities, generate employment, and foster resilience. The entrepreneurial spirit is crucial for translating innovative ideas into practical, scalable solutions that can address the complexities farmers, agribusinesses, and the broader agricultural value chain face.

Global Initiatives and Policy Frameworks:

The nexus between innovation, entrepreneurship, and agriculture has gained prominence on the global stage. International organizations, governments, and development agencies recognize the pivotal role of innovation and entrepreneurship in achieving sustainable agricultural development. Initiatives such as the Sustainable Development Goals (SDGs), with specific targets related to food security and sustainable agriculture, underscore the importance of embracing innovative and entrepreneurial approaches

Emerging Trends and Technologies:

Recent years have witnessed a surge in technological advancements and digital solutions that have the potential to revolutionize agriculture. From precision farming and smart irrigation to blockchain applications in supply chains, these innovations offer opportunities to enhance efficiency, traceability, and sustainability in agricultural practices. Understanding these emerging trends is crucial for formulating strategies leveraging innovation and entrepreneurship benefits.

Challenges and Opportunities:

While the nexus between innovation, entrepreneurship, and agriculture holds great promise, it has challenges. Barriers such as limited access to finance, inadequate infrastructure, and resistance to change within traditional farming communities pose obstacles to the seamless integration of innovation and entrepreneurship. Identifying these challenges and exploring strategies to overcome them is fundamental to unlocking the full potential of this nexus. In light of this backdrop, this research aims to delve into the complex and dynamic relationships between innovation, entrepreneurship, and agriculture. By exploring the historical evolution, current initiatives, and future possibilities, the study seeks to provide a comprehensive understanding of how this nexus can foster sustainable agricultural development. The subsequent sections of this research will delve deeper into the specific problem statement, research objectives, methodology, findings, and implications, contributing to the broader discourse on the transformative potential of innovation and entrepreneurship in agriculture.

While the significance of innovation and entrepreneurship in agriculture is widely acknowledged, a nuanced exploration of their interconnected dynamics must be more prominent. Despite their inherent potential, many agricultural systems must improve due to the limited integration of innovative practices and entrepreneurial initiatives. This research seeks to bridge this gap by delving into the complex relationships between innovation, entrepreneurship, and agriculture. Additionally, the study aims to pinpoint the barriers hindering the seamless integration of innovative and entrepreneurial approaches into agricultural practices. Understanding these impediments is crucial, as they have the potential to stifle the sector's overall growth and sustainability.

In pursuing these objectives, this research aspires to cast light on the intricate web of interactions between innovation, entrepreneurship, and agriculture. By doing so, it aims to offer actionable insights for policymakers, practitioners, and stakeholders, paving the way for a more robust and sustainable agricultural landscape capable of navigating the challenges of the contemporary world. The agricultural sector, integral to global food security and economic prosperity, confronts complex challenges that demand innovative and entrepreneurial solutions. While the potential synergies between innovation, entrepreneurship, and agriculture are widely acknowledged, a critical examination reveals persistent gaps and hurdles that hinder the realization of their full transformative impact.

Limited Adoption of Innovations:

Despite the continuous emergence of innovative technologies and practices in agriculture, a significant gap exists in their widespread adoption. Farmers, especially those in small-scale and traditional settings, often need more access to information, resources, and training, impeding the integration of innovations into their practices. Understanding the factors hindering the adoption of agricultural innovation is crucial for unlocking the sector's growth potential.

Insufficient Entrepreneurial Engagement:

While entrepreneurship is recognized as a driver of change in agriculture, there is a need to examine the extent to which entrepreneurial initiatives are integrated into the sector. Challenges such as inadequate access to finance, market uncertainties, and a lack of supportive ecosystems may inhibit the entrepreneurial spirit from flourishing within the agricultural landscape. Assessing the barriers to entrepreneurial engagement is essential for formulating strategies that empower agri-entrepreneurs and stimulate economic growth.

Sustainability Concerns:

The intersection of innovation, entrepreneurship, and agriculture must be evaluated through the lens of sustainability. The potential environmental and social impacts of specific agricultural innovations and

entrepreneurial activities necessitate a thorough examination. Balancing the drive for innovation and entrepreneurship with sustainable practices is crucial to ensure agricultural systems' long-term viability and resilience.

Technology Divide and Inclusivity:

The rapid evolution of agricultural technologies raises concerns about a potential technology divide. Large commercial farms may have more access to and capacity for adopting cutting-edge technologies, leaving smaller and resource-limited farmers disadvantaged. Ensuring inclusivity in the benefits of innovation and entrepreneurship is essential for preventing social disparities within the agricultural sector.

Policy and Institutional Barriers:

The effectiveness of the nexus between innovation, entrepreneurship, and agriculture is contingent upon supportive policy frameworks and institutional structures. Identifying barriers within existing policies and institutions that inhibit the seamless integration of innovative and entrepreneurial practices is crucial for crafting informed recommendations for policymakers and stakeholders.

Resilience in the Face of External Shocks:

Agriculture is inherently vulnerable to external shocks such as climate change, pandemics, and economic downturns. Examining the resilience of innovative and entrepreneurial agricultural systems in the face of these challenges is paramount. Understanding how the nexus between innovation, entrepreneurship, and agriculture contributes to the sector's adaptive capacity is crucial for building sustainable and resilient food systems. This research seeks to contribute to the discourse surrounding the nexus between innovation, entrepreneurship, and agriculture by addressing these multifaceted issues. By identifying and understanding these challenges, the study aims to provide insights to inform policies, guide practices, and foster a transformative environment within the agricultural sector. The subsequent sections of this research will delve into the research methodology, findings, and implications, with the overarching goal of advancing the understanding and application of innovation and entrepreneurship in agriculture.

Purpose of the Study

This study addresses what drives innovators to integrate sustainable agriculture into their entrepreneurial ventures. It aims to determine whether the value placed on innovation hubs within an ecosystem affects the intention to establish sustainable businesses. Today, innovation is gaining attention due to the increasing pressure of sustainable development and the need for researchers to examine the nexus between innovation, entrepreneurship, and agricultural business by incorporating sustainable value-creation practices into innovation hubs. Therefore, the primary objective was to collect and analyze secondary data from innovation hubs domiciled in universities in North America and how they affect the agricultural sector output of the cities' areas covered.

Source of Data: Statistics Canada

Rationale for the Study:

By identifying and examining the WHY and HOWs of the interface between innovation, entrepreneurship, and agricultural business, the hub can create an excellent intervention ground to rationalize resources and knowledge to develop agribusiness farming systems and sustainable value-creation practices.

Conceptual Framework:

This conceptual framework, rooted in Schumpeter's Classical Theory, provides a lens through which we can comprehend the nexus between innovation, entrepreneurship, and agriculture. By distilling the distinction between entrepreneurship, leadership, and management and recognizing the ubiquity of entrepreneurship in all human endeavors, the framework sets the stage for a nuanced exploration of how these elements interact and drive transformative change within the agricultural sector. In the subsequent sections of this research, we will delve into the methodology, findings, and implications, contributing to a deeper understanding of the dynamic interplay between innovation, entrepreneurship, and agriculture.

Schumpeter's Classical Theory:

Joseph Schumpeter's Classical Theory (SCT) is a foundational framework for understanding the intricate relationships between innovation, entrepreneurship, and agriculture. This conceptual framework draws upon two essential components distilled from SCT, unraveling the theoretical underpinnings that guide our exploration of the nexus between these critical elements.

Distinction Between Entrepreneurship, Leadership, and Management:

Schumpeter's SCT asserts a distinct role for entrepreneurship within the broader economic landscape. While leadership and management are integral components of organizational dynamics, entrepreneurship, according to Schumpeter, is a distinct and disruptive force. In the context of agriculture, this distinction

becomes imperative for understanding how innovative ideas are not only managed but also catalyzed into transformative actions.

Entrepreneurship in Agriculture:

a) Innovative Schumpeterian Entrepreneurs: Within the agricultural sector, innovative entrepreneurs act as agents of change, introducing novel ideas and technologies that disrupt existing practices. As per Schumpeter, these entrepreneurs are the prime movers of economic development. In agriculture, they spearhead the adoption of groundbreaking technologies, sustainable practices, and novel business models, ushering in waves of creative destruction.

b) Creative Destruction in Agricultural Practices: Schumpeter's concept of creative destruction finds resonance in agriculture, where introducing new methods and technologies often renders existing practices obsolete. Innovative entrepreneurs in agriculture are catalysts for this creative destruction, enabling the sector to evolve, adapt, and enhance its overall efficiency.

c) Entrepreneurial Leadership in Agricultural Innovation: The conceptual framework integrates Schumpeter's emphasis on entrepreneurship with the leadership dimension. Entrepreneurial leaders in agriculture navigate uncertainties and risks and inspire and mobilize stakeholders toward a shared vision of innovation and sustainability. In this context, leadership is intertwined with entrepreneurship, guiding the transformative journey in agriculture.

Ubiquity of Entrepreneurship in All Human Endeavors:

Schumpeter's SCT posits that entrepreneurship is not confined to business ventures but is pervasive in all human activities. Extending this notion to agriculture, the framework explores the ubiquity of entrepreneurship in the sector, recognizing its role in driving innovation, economic development, and societal progress.

Entrepreneurship Beyond Business Boundaries:

a) Social Entrepreneurship in Agriculture: Beyond traditional business entrepreneurship, the framework acknowledges the rise of social entrepreneurship in agriculture. Social entrepreneurs in the sector focus on addressing social and environmental challenges and fostering sustainable and inclusive agricultural practices. This broader view aligns with Schumpeter's vision of entrepreneurship permeating various facets of human endeavor.

b) Policy Entrepreneurship for Agricultural Development: Governments and policymakers play a pivotal role in shaping the agricultural landscape. The framework extends Schumpeter's perspective by considering policy entrepreneurship, where leaders actively advocate and implement policies that stimulate innovation, create conducive environments for entrepreneurs, and contribute to the overall advancement of agriculture.

c)Educational Entrepreneurship for Knowledge Transfer: The agricultural sector's evolution heavily relies on disseminating knowledge and skills. Entrepreneurship in education becomes a critical component, where educators and institutions act as entrepreneurs, innovating in delivering agricultural learning, technology transfer, and skill development.

Theory of Planned Behavior

The Theory of Planned Behavior, focusing on attitudes, norms, and perceived behavioral control, provides a robust framework for dissecting the intricacies of sustainable innovation and entrepreneurship in agriculture. By exploring sustainability attitudes, norms, behaviors, and opportunity recognition, this research aims to unravel the nexus between innovation, entrepreneurship, and agriculture, contributing to a deeper understanding of the factors that drive sustainable development in the agricultural sector.

The Theory of Planned Behavior (TPB), developed by Ajzen, is a valuable lens to analyze the nexus between innovation, entrepreneurship, and agriculture. This conceptual framework focuses on understanding human behavior by considering attitudes, norms, and perceived behavioral control. In the context of sustainable agriculture, this theory offers insights into the interplay between sustainability attitudes (SA), sustainability norms (SN), sustainability behaviors (SB), and opportunity recognition (OR).

Sustainability Attitudes (SA): Sustainability Attitudes as Precursors to Innovation and Entrepreneurship in Agriculture:

i) ***Definition and Measurement***: SA within the agricultural sector refers to individuals' positive or negative evaluations of adopting sustainable practices. The TPB posits that favorable attitudes toward sustainability will likely influence intentions and subsequent behaviors. Measurement involves assessing farmers' beliefs

and perceptions regarding the environmental, social, and economic dimensions of sustainability in agriculture.

ii) ***Impact on Innovation Adoption:*** Understanding farmers' SA is crucial for predicting their inclination towards adopting innovative agricultural practices. Farmers with positive sustainability attitudes are more likely to embrace and integrate innovations that align with sustainable principles, contributing to the evolution of the agricultural sector towards more resilient and eco-friendly practices.

Sustainability Norms (SN): ***Social Influences on Sustainable Agricultural Practices:***

i) Normative Beliefs: SN in the TPB refers to the perceived social pressures or norms surrounding a behavior. In agriculture, it involves understanding the influence of social groups, networks, and communities on farmers' decisions to adopt sustainable practices. Normative beliefs shape farmers' perceptions of what significant others expect regarding sustainability in agriculture.

ii) ***Collective Influence on Entrepreneurial Initiatives***: Social norms play a pivotal role in shaping the entrepreneurial landscape in agriculture. The TPB asserts that individuals are motivated to conform to perceived social expectations. Examining the influence of sustainability norms on entrepreneurial initiatives in agriculture helps identify how collective expectations impact the emergence and success of sustainable agribusiness ventures.

Sustainability Behaviors (SB): ***Translating Intentions into Sustainable Agricultural Practices:***

i) Behavioural Intentions: SB, according to the TPB, is influenced by individuals' intentions, which, in turn, are shaped by attitudes, norms, and perceived behavioral control. In the agricultural context, understanding the factors that drive farmers' intentions toward sustainable behaviors is essential for predicting actual sustainable practices.

ii) Role in Entrepreneurial Ventures: Translating intentions into entrepreneurial actions is critical. Farmers with strong preferences for sustainable agricultural practices are likelier to undertake entrepreneurial initiatives aligned with sustainability goals. Analyzing SB sheds light on the dynamics of sustainability-driven entrepreneurship in agriculture.

Opportunity Recognition (OR):

Sustainability-Driven Entrepreneurship through the Lens of Opportunity Recognition:

i) ***Entrepreneurial Cognition***: OR, within the TPB, is associated with individuals' perceptions of opportunities and ability to recognize and exploit them. In the agricultural sector, entrepreneurial cognition is crucial in identifying sustainable innovation and business development opportunities.

ii) ***Sustainability as an Entrepreneurial Opportunity***: Examining how farmers recognize opportunities in sustainable agriculture is vital for understanding the nexus between entrepreneurship and sustainability. The TPB suggests that individuals with positive attitudes, social support, and intentions toward sustainability are more likely to recognize and capitalize on entrepreneurial opportunities within the agricultural sector.

LITERATURE REVIEW

The agriculture and agri-food sector is pivotal in global economies, contributing to food security, rural development, and environmental sustainability. This literature review delves into the nexus between innovation, entrepreneurship, and sustainability in the Canadian agriculture and agri-food sectors. Examining scholarly works provides insights into the challenges and opportunities faced by Canadian farmers, agribusinesses, and policymakers in fostering a sustainable and entrepreneurial agricultural landscape.

This literature review provides a comprehensive overview of the interconnections between innovation, entrepreneurship, and sustainability within the Canadian agriculture and agri-food sector. It draws on a range of studies to highlight the dynamic nature of the sector, showcasing the impact of innovation and entrepreneurship on sustainability outcomes. The case study on the Canadian Agricultural Partnership exemplifies the collaborative efforts between the government, farmers, and agribusinesses to foster a sustainable and innovative agricultural landscape. This literature synthesis informs future research directions and policy considerations to advance Canada's resilient, entrepreneurial, and sustainable agriculture sector.

Innovation in the Canadian Agriculture Sector:

Overview of Innovation Drivers and Barriers:

In Canada, the agriculture sector has undergone significant transformations driven by technological advancements, research, and policy initiatives. Studies such as those by Janssen et al. (2017) and Smyth et al. (2019) highlight the multifaceted nature of innovation in Canadian agriculture, ranging from precision farming technologies to sustainable practices. These innovations are driven by government support, research and development, and the need for environmental stewardship.

Challenges and Solutions in Adopting Innovation:

While innovation is integral to the sector's growth, barriers persist. Research by Rozakis et al. (2020) explores challenges in adopting precision agriculture technologies in Canada. High implementation costs and a lack of awareness hinder widespread adoption. Understanding these challenges is crucial for policymakers and stakeholders seeking to formulate strategies that promote a culture of innovation within Canadian agriculture.

Entrepreneurship in the Canadian Agri-Food Sector:

Entrepreneurial Dynamics and Agribusiness Ventures:

The Canadian agri-food sector showcases a vibrant entrepreneurial landscape, evident in establishing diverse agribusiness ventures. Research by Minten et al. (2021) highlights the role of entrepreneurship in shaping the agri-food value chain in Canada. The study emphasizes the emergence of innovative business models, from farm-level enterprises to food processing and distribution, contributing to the sector's economic dynamism.

Social Entrepreneurship and Sustainable Agriculture:

Studies by Duarte Alonso et al. (2019) explore social entrepreneurship within the Canadian agricultural context. They delve into the role of social enterprises in promoting sustainable agriculture. These enterprises, driven by profit and social or environmental goals, are crucial in advancing sustainable practices. Analyzing the dynamics of social entrepreneurship sheds light on the potential for innovative and sustainable solutions within the Canadian agri-food sector.

Sustainability in Canadian Agriculture:

Sustainable Practices and Environmental Stewardship:

Sustainability is a key focus within the Canadian agriculture and agri-food sector, as evidenced by initiatives to reduce environmental impacts. Research by Smithers et al. (2018) investigates sustainable agricultural practices in Canada, emphasizing the adoption of conservation tillage and cover cropping. The study underscores the importance of aligning innovation and entrepreneurship with sustainable practices to address environmental concerns.

Policy Implications for Sustainable Agriculture:

Policy frameworks influence Canadian agricultural sustainability. Studies such as those by Alston et al. (2020) analyze the impact of agricultural policies on sustainability outcomes. The research highlights the need for policies that incentivize sustainable practices, emphasizing the role of government in fostering an environment conducive to innovation and entrepreneurship aligned with sustainability goals.

Case Study: Canadian Agricultural Sustainability Initiatives:

Canadian Agricultural Partnership (CAP):

The Canadian Agricultural Partnership (CAP) is a case study in policy-driven sustainability initiatives. Studies like that by McRae et al. (2019) outline CAP, which demonstrates a concerted effort to support sustainable agriculture. CAP aims to integrate innovation and entrepreneurship into sustainable agricultural practices through initiatives like the Environmental Stewardship and Climate Change Adaptation stream.

International Trade and Domestic Market Dynamics

International trade and the domestic market are

- integral components of the agricultural landscape,
- influencing the adoption of innovation,
- entrepreneurial activities, and
- sustainability practices.

This section explores the interconnected dynamics between international trade and the domestic market, shedding light on how these factors shape the trajectory of innovation and entrepreneurship while concurrently influencing sustainability initiatives within the agricultural sector.

International Trade's Impact on Agricultural Innovation and Entrepreneurship:

Market Access and Technology Transfer:

International trade serves as a conduit for exchanging agricultural innovations and technologies. Countries engaged in global trade often benefit from the cross-border transfer of knowledge and practices. For instance, advanced farming technologies developed in one country may find application in another through trade relationships, fostering innovation diffusion and entrepreneurial opportunities.

Export-Led Entrepreneurship:

Countries with a strong agricultural export orientation often witness the emergence of entrepreneurial ventures aligned with global market demands. Entrepreneurs in these nations may capitalize on niche markets, specialty crops, or unique production methods to meet international standards. Export opportunities can drive innovation in production processes and product development, stimulating entrepreneurship within the agricultural sector.

Domestic Market Dynamics and Agricultural Sustainability:

Consumer Preferences and Sustainable Practices:

The domestic market plays a pivotal role in influencing sustainability practices within agriculture. As consumer awareness of environmental and social issues grows, there is an increasing demand for sustainably produced food. Farmers and agribusinesses, responding to these preferences, may adopt sustainable practices such as organic farming, agroecology, or ethical sourcing. The domestic market, therefore, becomes a driver for sustainability-focused innovation.

Policy and Regulatory Framework:

Government policies and regulations, often shaped by domestic market dynamics, can significantly impact adopting sustainable practices. Incentives, subsidies, or regulations promoting environmentally friendly and socially responsible agriculture influence the decision-making of farmers and agri-entrepreneurs. The domestic market's influence on policy decisions can create an environment conducive to sustainable innovation and entrepreneurship.

Synergies and Tensions Between International Trade and Domestic Priorities:

Harmonizing Global Demand with Local Needs:

While international trade opens avenues for innovation and entrepreneurship, aligning global market demands with local sustainability priorities can pose challenges. Striking a balance between meeting international standards and addressing domestic environmental and social concerns is crucial. Entrepreneurs must navigate these tensions to ensure that innovation and trade practices align with the broader sustainability goals within the domestic context.

Global Competition and Local Resilience:

The global nature of trade introduces elements of competition that can impact local resilience. Agri-entrepreneurs must adapt to international market dynamics, potentially influencing the adoption of innovative and sustainable practices. Balancing the need for competitiveness with preserving local agricultural resilience is critical for policymakers and entrepreneurs alike.

Comparative Advantage in Agricultural Innovation and Trade: A Nigerian Perspective

Nigeria, endowed with abundant land and water resources, access to international markets, a robust R&D capacity manifested in emerging tech hubs, a global reputation for safe, top-quality food, and a commitment to land stewardship, holds a distinctive comparative advantage in agricultural innovation and trade. This section explores how these elements synergize to position Nigeria favorably in the global agricultural landscape. Nigeria's comparative advantage in agricultural innovation and trade, grounded in abundant land and water resources, international market access, strong R&D capacity, a global reputation for safe food supply, and a commitment to land stewardship, forms a robust foundation for sustained growth. The synergy among these elements addresses domestic needs and propels Nigeria into a prominent role in the global agricultural landscape. By capitalizing on these strengths, Nigeria has the potential to become a transformative force in shaping the future of international agricultural trade and innovation.

Abundant Land and Water Resources:

i) Natural Endowments for Agricultural Diversity:

Nigeria's vast land and water resources are ideal for various agricultural activities. The nation's geographical diversity allows for the cultivation of various crops and the rearing of diverse livestock. This

diversity caters to domestic needs and positions Nigeria as a potential global supplier of various agricultural products.

Sustainable Agriculture Practices:

Nigeria's abundant land and water resources enable it to embrace sustainable agricultural practices. Implementing agroecology and organic farming techniques can enhance produce quality and meet international standards for eco-friendly and socially responsible agriculture. This sustainability and diversity have become vital components of Nigeria's comparative advantage.

Access to International Markets:

i) Strategic Geographical Location:

Nigeria's location facilitates strategic access to international markets. With well-established transportation infrastructure, including seaports and airports, Nigerian agricultural products have the potential to reach global destinations efficiently. This geographical advantage reduces logistical challenges and positions Nigeria as a competitive player in the worldwide agri-food trade.

Trade Agreements and Collaborations:

Strategic trade agreements and collaborations further enhance Nigeria's access to international markets. Bilateral and multilateral agreements can open avenues for export, fostering economic growth. The nation's diplomatic efforts to strengthen trade relations contribute to its ability to navigate global markets successfully.

Strong R&D Capacity (Tech Hubs):

i) Innovation Ecosystem for Agricultural Technology:

Nigeria's emergence as a hub for technology and innovation, particularly in the agricultural sector, is a testament to its strong R&D capacity. Tech hubs foster the development of cutting-edge solutions, from precision farming technologies to agri-tech applications. This innovation ecosystem positions Nigeria as a pioneer in adopting technological advancements that can revolutionize agricultural practices.

ii) Knowledge Transfer and Skill Enhancement:

The synergy between solid R&D capacity and the agricultural sector creates a fertile ground for knowledge transfer and skill enhancement. Collaborations between tech hubs, research institutions, and farmers facilitate disseminating innovative practices. This dynamic ecosystem improves domestic agricultural productivity and enhances Nigeria's global standing as an adopter of technological solutions in agriculture.

Strong Global Reputation as a Trusted Supplier:

i) Building on Trust and Quality:

Nigeria's reputation as a trusted supplier of safe, top-quality food is valuable in the global market. This reputation is particularly influential among the Nigerian diaspora, who often seek familiar and trustworthy sources for their food needs. Leveraging this trust, Nigeria can establish itself as a reliable supplier and capitalize on the growing demand for diverse, authentic food products.

ii) Cultural Connection and Niche Markets:

The Nigerian Diaspora's preference for culturally resonant food creates opportunities for niche markets. By strategically marketing products that align with cultural priorities, Nigeria can carve a distinctive space in international markets. This cultural connection enhances trade and contributes to preserving and promoting traditional Nigerian agricultural products.

Strong Stewards of the Land – Land as an Asset:

i) Sustainable Land Management Practices:

Nigeria's commitment to being strong stewards of the land underscores its dedication to sustainable land management practices. These practices, including soil conservation, water management, and afforestation, contribute to long-term soil fertility and environmental preservation. Sustainable land management aligns with global trends and standards, enhancing Nigeria's appeal as a responsible agricultural producer.

ii) Land as a Resource for Diverse Agriculture:

Viewing land as an asset allows Nigeria to engage in diverse agricultural activities. Beyond traditional crops, the nation can explore niche markets and high-value agricultural products. The versatility of land use, coupled with sustainable practices, positions Nigeria to cater to evolving global demands while ensuring the longevity of its agrarian sector.

Fostering Climate Resilience and Environmental Sustainability: The Hub's Commitment

In response to the urgent global call for climate action and environmental stewardship, our hub is a beacon, dedicating its efforts to support initiatives that reduce greenhouse gas emissions, adapt to climate change, and seize evolving economic opportunities, mainly through engagement with the Nigerian

Diaspora. This commitment aligns with our vision for a sustainable and resilient future for the long-term viability of sectors affected by climate change.

In embracing the challenges posed by climate change and environmental degradation, our hub emerges as a catalyst for positive change. By supporting initiatives that reduce greenhouse gas emissions, adapt to climate change, and seize evolving economic opportunities, primarily through engagement with the Nigerian Diaspora, we envision a future where sectors not only withstand environmental challenges but thrive sustainably. Together, we are committed to fostering resilience, driving innovation, and creating a legacy of environmental stewardship for future generations.

Supporting in Reducing Greenhouse Gas Emissions:

i) Advancing Sustainable Practices:

Our hub takes a proactive stance in championing sustainable practices that reduce greenhouse gas emissions. We recognize the critical role of agriculture and other industries in emission levels and actively support initiatives that promote carbon sequestration, energy efficiency, and sustainable resource management. By engaging with stakeholders, advocating for eco-friendly policies, and implementing sustainable solutions, we aim to catalyze positive change in reducing the carbon footprint.

ii) Promoting Innovation for Climate Mitigation:

Innovation is a cornerstone of our approach to reducing greenhouse gas emissions. Through collaborations with research institutions, technology hubs, and industry experts, we strive to identify and implement cutting-edge technologies and practices that contribute to climate mitigation. From precision agriculture to clean energy solutions, our commitment to innovation seeks to drive tangible results in reducing emissions across various sectors.

Adapting Climate Change Protection for Long-Term Sector Viability:

i) Resilience-Building Initiatives:

Recognizing the inevitability of climate change impacts, our hub actively supports resilience-building initiatives. This involves working closely with communities, businesses, and policymakers to develop and implement adaptive strategies. From climate-smart agriculture practices to infrastructure development that considers future climate scenarios, our focus is on enhancing the long-term viability of sectors vulnerable to climate change.

ii) Education and Capacity Building:

Adaptation requires knowledge and capacity. By fostering a culture of resilience, we aim to create a network of stakeholders equipped to adapt to changing environmental conditions and contribute to the sustainable development of their respective sectors.

Seizing Evolving Economic Opportunities – Nigeria Diaspora:

i))Engaging the Nigerian Diaspora for Sustainable Growth:

The Nigerian Diaspora represents a powerful force in our mission to seize evolving economic opportunities linked to climate action. Leveraging this dynamic community's expertise, resources, and networks, our hub seeks to channel investments and collaborations that align with sustainable development goals. From green investments to knowledge exchange, we believe the Nigerian Diaspora plays a pivotal role in unlocking economic opportunities that benefit the homeland and the global community.

ii) Promoting Green Entrepreneurship:

The evolving economic landscape presents opportunities for green entrepreneurship. Our hub actively supports and promotes initiatives that encourage sustainable business practices within the Nigerian Diaspora community. By fostering a culture of innovation, social responsibility, and environmental consciousness, we aim to contribute to the emergence of green entrepreneurs who recognize the interconnectedness of economic success and environmental sustainability.

Cultivating Progress: Empowering Research and Innovation in Agriculture

Research and innovation are cornerstones of progress in the ever-evolving landscape of agriculture and agri-food. Our commitment is unwavering as we advocate for and contribute to developing science-based solutions, facilitate funding mechanisms, and empower the creation of tools that address challenges, anticipate disruptions, mitigate threats, and capture emerging opportunities in the agricultural sector.

As stewards of progress in the agricultural and agri-food sectors, our commitment to research and innovation is a commitment to a sustainable and prosperous future. By funding science-based solutions, supporting the development of tools that address challenges, and preparing for disruptions while capturing emerging opportunities, we strive to cultivate an environment where agriculture survives and thrives in the

face of a dynamic and evolving global landscape. Together, we shape a future where innovation is the driving force behind a resilient, productive, and sustainable agricultural sector.

Funding to Support the Development of Science-Based Solutions:

Investing in Research Excellence:

We recognize the pivotal role of funding in driving scientific breakthroughs. Our commitment extends to actively supporting research endeavors that promise innovative solutions. By providing financial resources, we aim to foster an environment where scientists and researchers can explore uncharted territories, push the boundaries of knowledge, and develop science-based solutions that propel the agricultural sector forward.

Collaborative Funding Models:

Our approach to funding emphasizes collaboration. We advocate for and facilitate partnerships between public and private entities, research institutions, and governmental bodies. Collaborative funding models pool resources and leverage diverse expertise, fostering a synergistic approach to solving complex challenges in agriculture.

Tools that Address Known Challenges:

Precision Agriculture and Data-Driven Solutions:

Addressing known challenges in agriculture requires precision and data-driven insights. We actively support developing and implementing tools that harness the power of technology, data analytics, and artificial intelligence. From precision farming techniques to advanced monitoring systems, these tools empower farmers and stakeholders to make informed decisions, optimize resource utilization, and overcome longstanding challenges in crop management, pest control, and resource efficiency.

Sustainable Practices Toolkit:

The shift towards sustainable agriculture necessitates a toolkit of practices that balance productivity with environmental responsibility. Our focus is supporting research and innovation that develop and disseminate sustainable farming practices. From organic farming techniques to regenerative agriculture models, these tools are designed to address environmental concerns, enhance soil health, and promote a resilient agricultural ecosystem.

Prepare for Potential Disruptions and Threats and Capture Emerging Opportunities:

i) Resilience-Building Research:

Anticipating potential disruptions and threats requires a proactive stance. Our support for research endeavors extends to projects that build resilience within the agricultural sector. This includes studies on climate change adaptation, risk management strategies, and the development of resilient crop varieties. By preparing for potential challenges, we aim to fortify the sector against unforeseen disruptions.

ii) Opportunity Mapping and Early Adoption:

Innovation thrives on the ability to capture emerging opportunities. Our commitment involves supporting research initiatives that explore market trends, consumer preferences, and global economic shifts. By understanding the evolving landscape, we empower stakeholders in the agricultural sector to position themselves to capture emerging opportunities strategically. Early adoption of innovative practices and technologies ensures a competitive edge in the ever-changing market.

Sustainability Concerns

Sustainability is the general agreement to balance economic, environmental, and social factors on an equal and harmonious basis to meet current needs without affecting the needs of future generations.

For this study, innovation is creative destruction in climate change, biodiversity, or water shortages.

Entrepreneurs are constantly innovating based on environmental challenges – Yielding entrepreneurial creativity of the future.

The hub will focus on eco-entrepreneurship, green entrepreneurship, and environmentally friendly business models.

Sustainable Entrepreneurship in Agriculture

Sustainable entrepreneurship - recognition, development, and exploitation of opportunities to provide economic, social, and ecological benefits for future goods and services.

Given the existence of sustainable entrepreneurship controls, entrepreneurs' triple-bottom-line role is to manage the balance between the planet, humans, and profits.

Sustainable entrepreneurship has become a synergistic combination of entrepreneurial programs, agriculture, and innovation (tech).

Reasons for the hub

- The scarcity of natural resources.

- Develop and nurture creative mindsets to change from a traditional model to a sustainable tomorrow's market.
- Combine economic, social, and environmental value creation of sustainable agribusiness.
- Drives the idea of the sustainable development of enterprises and the competitive advantage of each enterprise.
- Sustainable entrepreneurship in an innovation hub is a business model that integrates three domains of sustainable development: productivity, economics, environment, human condition, and social development.
- The sustainable entrepreneurial intention framework into professional practices.

CONCLUSION

Insight into the determinants of sustainable entrepreneurship can be an essential step toward designing a practical and durable policy mechanism for implementing innovation hubs when developing entrepreneurial agriculture education programs.

i. Agricultural universities must value sustainable entrepreneurship.
ii. Support Innovation hubs that provide a meeting place for innovation, entrepreneurship, and agriculture.

Cultivating a Sustainable Future for Agriculture Through Innovation and Research

In the ever-evolving landscape of agriculture and agri-food, the journey toward a sustainable future is marked by a resolute commitment to research and innovation. The preceding exploration has underscored the critical role of these pillars in shaping a future where agriculture not only survives but thrives in the face of challenges, disruptions, and emerging opportunities. As we navigate the complexities of the agricultural sector, the conclusion drawn is one of optimism and purpose, driven by a shared vision for a sustainable and prosperous future.

Empowering Science-Based Solutions:

The commitment to funding research, which serves as the bedrock for science-based solutions, signifies a collective understanding of the transformative power of knowledge. The investments made in research excellence fuel scientific breakthroughs and lay the groundwork for innovative practices that will redefine the trajectory of agriculture. It is a testament to the recognition that solutions to pressing challenges are rooted in the rigor of scientific inquiry.

Tools Addressing Known Challenges:

The tools developed to address known challenges in agriculture represent a paradigm shift towards precision, efficiency, and sustainability. From precision agriculture leveraging advanced technologies to sustainable farming practices prioritizing environmental health, these tools empower farmers, researchers, and stakeholders to navigate challenges with informed decision-making. This arsenal of tools addresses current issues and positions the agricultural sector as a resilient and adaptive force.

Preparing for Disruptions and Seizing Opportunities:

Anticipating potential disruptions and capturing emerging opportunities are twin endeavors that demand foresight, adaptability, and proactive engagement. The resilience-building research initiatives undertaken are a strategic response to the uncertainties posed by climate change, economic shifts, and unforeseen challenges. Simultaneously, the commitment to opportunity mapping and early adoption signifies a determination to not merely react to change but to shape and capitalize on emerging trends. It is a commitment to turning challenges into opportunities and uncertainties into strategic advantages.

Collaboration and Synergy:

Throughout this exploration, the theme of collaboration has emerged as a driving force behind successful research and innovation endeavors. Whether through collaborative funding models, interdisciplinary research initiatives, or partnerships between diverse stakeholders, the synergy created amplifies the impact of efforts. The realization that no single entity can address the multifaceted challenges of agriculture alone underscores the importance of collective action and shared expertise.

Vision for a Sustainable Future:

In conclusion, the journey toward a sustainable future for agriculture is characterized by a shared vision that extends beyond individual initiatives. This vision is of an agricultural sector that sustains itself and actively contributes to environmental stewardship, economic growth, and societal well-being. It is a vision that places innovation and research at the forefront, recognizing them as indispensable tools for navigating the complexities of a dynamic global landscape.

As we reflect on the commitments outlined in supporting science-based solutions, developing tools, and preparing for disruptions and opportunities, it is evident that the path forward requires continuous collaboration, unwavering dedication, and a spirit of innovation. The strides made in research and innovation today are the building blocks of a resilient and sustainable agricultural sector for future generations. It is a journey that transcends boundaries, embraces diversity, and leverages the collective wisdom of those committed to cultivating a future where agriculture is not only a source of sustenance but a driving force for positive global change. Together, we embark on this journey, developing a sustainable future for agriculture through the transformative power of research and innovation.

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SUB-THEME

AGRICULTURAL BUSINESS AND SME DEVELOPMENT IN NIGERIA

DIASPORA REMITTANCES AND THE AGRICULTURAL SECTOR IN NIGERIA

[1]Nwachukwu, Athanasius C. [2]Ekeagwu I. and [2]Ezeanyagu, Ugochukwu C.
[1]Faculty of Social Sciences, Federal Polytechnic Nekede
[2]Department of Economics, Michael Okpara University of Agriculture, Umudike
Corresponding author: athanchukspoly@gmail.com

ABSTRACT
This research work examined the effect of diaspora remittances on the growth of agricultural sector of the Nigerian economy for the period 1990-2021. Nigeria is known to be the leading country in Sub-Sahara Africa with the highest inflow of remittances but the sectorial impact of these remittances is yet to be ascertained in empirical literature. We used three diaspora remittance variables as independent variables which are workers remittances, migrant remittances and exchange rate. This led to the formulation of a model based on the sector selected. The data were sourced from the National Bureau of Statistics and the World Bank and analysed using Econometric techniques. The results indicated that migrant and workers remittances increased growth of the agricultural sector significantly with long run causality running from the diaspora remittance variables to the sectorial growth indicators. The conclusion was that diaspora remittances has helped to increase output of the agriculturalsector in Nigeria and we recommended the intensification of technical exchange programmes between Nigeria and other advanced countries of the world to increase remittance earnings and as well unification of exchange rates in order to fully explore the many benefits from diaspora remittances into the agricultural sector of the Nigerian economy.
Keywords: Diaspora, Remittances, Growth, Agriculture, Nigeria

INTRODUCTION

There has been increased inflow of remittances to developing countries in the past two decades and Nigeria is at the top of recipients in Africa with over 50 percent of diaspora remittances coming to Nigeria (World Bank, 2021). The World Bank further reported that migrants to developed countries have been on a rapid increase and this trend is followed by an increase in the amount of remittances sent to developing countries by these migrants which achieved a level of over $4 trillion in 2021 alone (World Bank, 2021). Migrant remittances, according official statistics, provide a financial flow for developing countries in Africa that is higher than the official development aid (World Bank, 2021). Remittances in developing countries are currently put at 5.3 percent of GDP and this figure is expected to surpass 10 to 20 percent in the near future (Anetor, 2019).

Historically, Nigerians have migrated to the United Kingdom (UK), United States of America (USA) and other countries in Africa since after independence (World Bank, 2021). Nigerians have increasingly emigrated to countries such as Ghana, Cameroon, and particularly wealthier economies such as Gabon, Botswana and South Africa (Adepoju 2011). The growth index of diaspora remittance inflows over the years has attracted the attention of stakeholders, such as governments, private and international organizations, as it's a viable source of external financing. Evidence from statistical figures show that diaspora remittances has out-performed other sources of capital inflows such as Foreign Direct Investment (FDI) and Foreign Portfolio Investments (FPI) in several developing economies, while it is a major seedbed of foreign exchange for others. By its nature, diaspora or migrant remittance is uncoerced, with the objective of improving the welfare of recipients, as well as their respective countries. The flow of diaspora remittances during moments of economic delinquency or failure when juxtaposed with other economic inflows further highlights its ability as a vital economic growth factor and domestic investment driver (Englama, 2007). Thus, this research work is a quest to determine the effect of diaspora remittances on sectorial growth of Nigeria with particular focus on the agricultural, industrial and service sectors of the Nigerian economy.

Data from the World Development Indicators (WDI) show that by 2014, remittances had out spaced Foreign Direct Investment (FDI) and Official Development Assistance (ODA), being second only to oil as a foreign exchange earner for Nigeria as of 2020 (Ime, Orok, &Udoka, 2020). World Bank (2021)

estimates show that as of 2020, Nigeria has moved into the top five recipients of remittances in the world and received up to 82 per cent of the total remittance inflow to West African countries in 2017 and 2020 respectively. Thus, this rapid growth of remittances in Nigeria raises the question of where these money(s) are being invested and whether these remittances help in any way to ensure expansion of the productive capacity of the economy. The main problem identified here is that despite the significant flow of remittances into the country in the recent past, not much is known about the impact of these remittances on the various sectors that make up the Nigerian economy.

Furthermore, empirical studies from other countries have produced mixed results. Some studies suggest that remittances are primarily used for consumption purposes while other studies are of the view that remittances are used for investment rather than for consumption. Many of these studies were not carried out in Nigeria (Yang and Batista, 2022; Uddin, Rahman and Majumder, 2022; Veljanoska, 2021; Perez-Saiz& Bari, 2019) while the few that were done in Nigeria (Wagner and Aras, 2022; Emmanuel and Omeje, 2022; Onime and Ijeoma, 2021, Agu, 2020; Ime, Orok and Udoka, 2020) used cross country data where the behavioural pattern of the remittances were analyzed by combining data from several developing countries. The result of this approach was that country specific dynamics were lost in the process. This confirms the paucity of extant economic literature on remittances and economic growth from a multi sectorial point of view. Thus, it is in the light of these that this study is being carried out to contribute in the solution to the problems identified above with respect to diaspora remittances and their effect on agricultural sector of the Nigerian economy. The following questions are considered relevant to this paper:

- What is the effect of migrant remittances on the growth of the agricultural sector in Nigeria?
- To what extent do workers remittances affect the agricultural sector output in Nigeria?
- Does long run relationship exist between diaspora remittances and the agricultural sector output in Nigeria?
- Does causality exist between diaspora remittances and the agricultural sector output in Nigeria?

LITERATURE REVIEW

Diaspora Remittances

Diaspora remittances have been severally defined by various scholars tailored according to the mode, uses and nature of the transfer. Remittances in modern times, are defined to include the investment by way of acquisition of asset-producing instruments of companies in countries of origin. According to the IMF, remittances are a major lifeline for development (Ratha, 2022). Alessandra and Ivo (2006) defined diaspora remittances as monetary and non-monetary items that migrants earn while working abroad and later send back to their families living in their homeland. They went further to assert that this is seen as workers' remittances as these monies sent home are earned from works that were formally done by these migrant workers. Thus, diaspora remittances are part of the migrants income from those resident in another country sent home to their families or households resident in the original country, in the case of international remittances, or from one region (usually urban areas) to another region (usually rural areas). They are usually in the form of cash or goods but nevertheless form a significant portion of the recipients' income.

Harrison (2003) defined remittances as the sum of workers' earnings and compensation of employees and migrant transfer while Ratha (2022) on his part views diaspora remittances as cash sent to dependents from another country which represent a major vehicle for reducing the scale and severity of poverty in the developing world. The early definition given by Levitts (1996) appears to capture the intrinsic nature of remittances, which he stated as ideas, practices, identities and social capital that flow as social remittances.

Workers' remittances

Workers' remittances are the remittances of workers living abroad to families at home. Remittance inflows from migrant workers is a significant source of capital flows globally and more particularly in developing countries with particular focus on Africa (Adeyi, 2015; Adarkwa, 2015). A suggestion by a theoretical strand stated that: Workers' remittances are mainly used for consumption purposes and hence, have nominal impact on investment.

The Development Prospects Group (DPG) of the World Bank estimates that in 2019 alone, the number of Nigerians that have left the country to other parts of the world are about 836,832 persons spread mainly across other parts of Africa, Asia, Europe and North America. Docquier and Bhargava (2019) noted that Nigeria loses about 36.1 percent of all its skilled manpower with tertiary education to migration. Estimates on the proportion of physicians loaned to the rest of the world after training range from 1,548 to 4,856

(between 4.3 percent and 13.6 percent) and nearly 12, 600 (11.7 percent) of trained nurses find jobs outside the country after training (Docquier and Bhargava, 2019). Inward remittances by these Nigerians abroad are estimated to run into several billions of dollars. Orozco (2020) estimates that approximately 65 percent of total official workers remittance inflows to Sub-Sahara Africa Countries (SSA) and 2 percent of formal global remittance flows come to Nigeria. From a meager US$1.18 billion in 1999, remittance inflows into the country are estimated to be about US$10.58 billion in 2006. As at the end of 2020, remittance inflows stand second only to oil receipts, making them a prime foreign exchange source for the country.

According to Benmamoun & Lehnet (2013), workers' remittances are often motivated by the desire of the migrant workers to support their families, friends and or investment in their home country. It has been diversely viewed in literature. The World Bank and International Monetary Fund (IMF) while defining workers remittance stratified it into three categories. Firstly, it is the transfer made in kind or cash from migrants to their household in home countries; secondly, it connotes compensation and every other form of payments or remuneration paid in kind or cash to employees who worked in countries other than their home countries; and lastly, it is the migrant capital transfer in form of financial assets as they move from one country to another and stay for more than one year (Orozco, 2020).

Figure 1: Trend of Worker's Remittances to Nigeria (1990-2021)
Source: World Bank Data Base (2020)

Numerically, the figure 1 above reveals that level of workers remittance that stood at N1011.8 in 1994, had witnessed a slight decline in 1995 to 1999, but rose up again in year 2000. However, total remittance was valued at N1899.6 billion in 2005, and N2,149.1 billion in 2006, having witnessed slow increase up till 2008 when it stood at N2,258.7, but increased sharply to N2,710.3 in 2009. However, evidence from figure 2.1 further show that it continually rose to N3,265.2 billion in 2014, but this increase was not proportionately significant, when compared to the increment that occurred between 2008 and 2009. Moreover, after the slow increment from 2010 through 2014, workers remittance witnessed a great increase until it got to the peak of N3,809.1 billion in 2015. From 2016 however, the story took a new dimension, as there was a steady and sharp increase in workers' remittances to the level of 4,743.9, and 10,571 billion in 2017 and 2020 respectively (World Bank, 2020).

Migrant remittances

Loto and Alao (2019) clearly stated the distinction in diaspora remittances by disaggregating diaspora remittances into worker's remittances and migrant remittances. They defined workers' remittances as the remittances of workers living abroad to families at home while migrant remittances or what they called transfers are remittances of those who want to change their base back home from abroad to come and invest at home. The World Bank (2021) clearly stated this distinction by asserting that migrant remittances are more productively utilized for investment in recipient economies while workers remittances are mainly for consumption purposes.

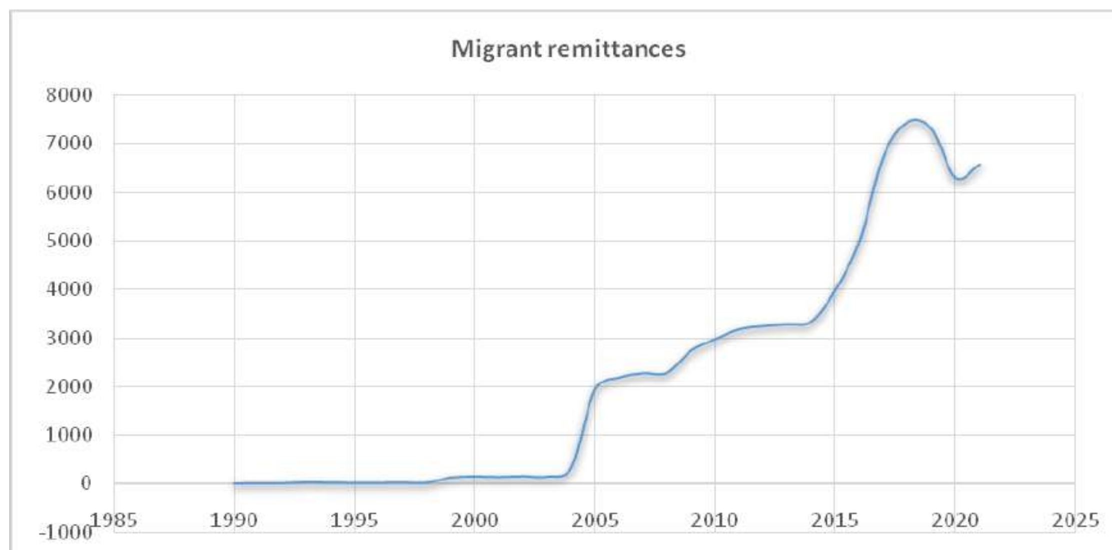

Figure 2: Trend of Migrant Remittances to Nigeria (1990-2020)
Source: World Bank Data Base (2020)

Figure 2 above reveals that migrant remittances rose from N80million in 1990 to about N1.3trn in 2005. This sharp increase depict positive movement in the diaspora remittances to Nigeria despite the World economic downturn witnessed at the time. In other words, the quest for Nigerians to change their base back home from abroad to come and invest at home led to the sharp increase in migrant remittances. This continued to increase and reached all-time high of N7.4trn in 2018 before falling slightly to N6.2trn at the end of 2020 and 2021 (World Bank, 2020). Based on the figures released above, the World Bank (2020) asserted that Nigeria received about 65% of the official recorded remittance inflow to Africa and about 20% of the global remittance inflows. It is estimated that migrant remittance inflows into the Nigerian economy have outgrown foreign direct investment, official development assistance, and other capital inflows into the country (Onyeisi and Odo, 2018).

METHODOLOGY

The research design employed in this research is the *ex-post facto* research design. A close look at the models shows a common reoccurring variable and that is remittances as aggregate. Having examined these previous studies, the econometric model of Onyeisi and Odo (2018) comes closest to our study since we intend to find the nexus between diaspora remittances and economic growth. Onyeisi and Odo (2018) specified as follows:

RGDP = f(IRI, BOT, INF, ODA) [0]

Where RGDP is real gross domestic product, IRI is international remittance inflows, BOT is balance of trade, INF is inflation and ODA isoverseas development assistance.

However, by way of modification, we disaggregate remittances into three forms of remittances as already identified in the literature. Overseas development assistance (ODA) may not be classified as remittance because it comes as grants from developed countries to specific sectors in developing countries that are concessional in nature (OECD, 2020). Thus, we drop ODA, inflation and balance of trade while replacing them with the two forms of remittances already identified. The specification of Onyeisi and Odo (2018) is modified to suit our purpose. The simple linear model is of the form:

Y = *f*(x) [1]

Where Y is dependent (economic growth) and x is the independent variables (diaspora remittances). By relating the above functional equation to our work, we specify as follows:

EG =f(DR) [2]

Where EG economic growth is proxied with real gross domestic product and DR is diaspora remittances. By disaggregating diaspora remittances (DR) into its two major forms, we obtain the following specification:

RGDP = *f*(WREM, MREM) [3]

Where:

WREM = Workers' remittances

MREM = Migrant remittances

To further modify the specification of Onyeisi and Odo (2018), we introduce exchange rate as an intervening variable in the model and re-specify the model thus:

RGDP = *f*(WREM, MREM, EXR) [4]

One major twist in this study is the multi-sectorial approach to economic growth. This simply means that we recognize the fact that diaspora remittances go into several sectors of the economy and not only one sector. Therefore, recognizing this fact, we break economic growth down into the following sectorial growth as follows:

AOP = *f*(WREM, MREM, EXR) [5]

Where:

AOP = Agricultural sector's output per capita

The disaggregation of economic growth into a multi-sectorial growth is based on the Central Bank of Nigeria (CBN's) classification of the GDP in the Statistical Bulletin, where GDP comprises total output from the agricultural sector.Transforming the functional equations into linear econometric forms, we will include the coefficients and the time variant while the three models becomes:

Model One:

$$AOP_t = \alpha_0 + \alpha_1 WREM_t + \alpha_2 MREM_t + \alpha_3 EXR_t + \varepsilon_{1t} \quad [6]$$

Model estimation

Estimation of the mode parameters was done using the Error Correction model. This is based on the outcome of the stationarity test which showed integration at first difference i.e. I(1). In this case, the fundamental Ordinary Least Square regression principles are obeyed. The error correction model estimates the short run form of the model which includes the long run speed of adjustment. The model shows the lag estimates of the residual which represents the speed of adjustment of the model to long run equilibrium. Like every other regression estimate, the hypotheses in the ECM model are tested using the t-test of individual significance while the Joint test is carried out using the F-statistic from the short run estimates. These are explained further below:

- **The individual tests**

This test applies to the individual parameter estimates as their values are tested at 5 per cent level of significance such that revelations are made on whether the estimated values are significant or not. The steps to testing of a statistical assumption follow thus,

Hypothesis

Ho: $\beta i = 0$: that is, X_i is not related to Y when $X_{k \neq I}$ is held constant

H1: $\beta i \neq 0$: X_i is related to Y when $X_{k \neq I}$ is held constant

Test statistic:

$$t_{cal} = \frac{\beta_i}{SE(\beta_i)} \quad i = 1,2,3,4,5$$

Decision Rule:

Reject H_0 if t-cal**>** t-table and accept H_1

Accept H_0 if t-cal**<** t-table and reject H_1

The t-table is obtained as $t_{\alpha/2,n-k}$ Where: $\alpha = 0.05$

- **Joint test**

This test is used to carry out the joint test between the independent variables and the dependent variable**.**

Hypotheses:

H_o: $b_1 = b_2 = b_3 = b_4$ i.e. there is no significant relationship between Y, and X_1, X_2, X_3, X_4, jointly

H_1: At least one of the b's $\neq 0$ i.e., a relationship exists between Y and the Xs jointly.

Sources of Data

The sources of data employed for this research are secondary sources and they include:

1. The Central Bank of Nigeria Statistical Bulletin (2021) edition.
2. World Bank Development Indicator, WDI (2021).

Specifically, data on workers remittances and migrant remittances are sourced from the World Bank (2021) while the sectorial growth indicators (agricultural sector output) as well as exchange rate are sourced from the Central Bank of Nigeria Statistical Bulletin (2021) edition.

RESULTS

The Table 1 below gives a summary of the unit root test at 5% level of significance with trend and intercept.

Unit root test

Table 1: Summary of Unit Root Test Result

		ADF Test statistics			
Variables		**At Level**	**1st Difference**	**Decision**	**Order of Integration**
Agricultural Output (AOP)		-1.7919 [0.6843]	-4.3391 [0.0091]	Stationary at 1st difference	I(1)
Workers' Remittances (WREM)		-2.7951 [0.2098]	-4.6218 [0.0046]	Stationary at 1st difference	I(1)
Migrant Remittances (MREM)		-0.7022 [0.9618]	-4.8669 [0.0413]	Stationary at 1st difference	I(1)
Exchange Rate (EXR)		-2.2891 [0.4272]	-5.2519 [0.0010]	Stationary at 1st difference	I(1)
Critical Values	**1%**	***-4.2846***	***-4.2967***		
	5%	***-3.5629***	***-3.5683***		
	10%	***-3.2153***	***-3.2184***		

*Source: Researchers' Computation using E-Views 9.0 **p-values in parenthesis*

The unit root test above reveals that the data on agricultural sector output (AOP), migrant remittances (MREM), workers remittances (WREM) and exchange rate (EXCR)are all stationary at first difference and are said to be integrated of order one, I(1). In other words, none of the data achieved stationarity at level but only after first differencing. This implies that the data have statistical properties that did not vary over the time period of study i.e. 1990-2021. Based on this result, we test for the existence of a long-run relationship or co-integration amongst the variables in the three models formulated.

Johansen Co-integration Test

This test confirms the long run relationship between workers remittances, migrant remittances and output of the agricultural sector. The test is summarized below:

Table 2: Summary of the Engle-GrangerCointegration Tests

	Tau statistic		**z-statistic**	
Model 1	**Tau stat.**	***p-value***	**z-stat**	***p-value***
AOP	-5.806552	(0.0035)**	1288.011	(0.0000)**
	-2.811799	(0.5430)	-18.36811	(0.2046)
	-11.72142	(0.0261)**	23.54847	(0.0000)**
	-2.199295	(0.8087)	-8.612736	(0.8177)

Note: ** indicates that the test statistics are significant at the 5 per cent level.
Source: Researchers' Computation using E-view 9

The Table above .2 summarizes the Engle-Granger cointegration test using the Tau statistics for the model. In the model one where agricultural output was the dependent variable, looking at the Tau test, there are only two significant p-values of 0.0035 and 0.0261 at 5 per cent level which implies two cointegrating equations. Since the Tau statistics show two cointegrating equations for the three models, we conclude that there is long run relationship between workers remittances, migrant remittances and outputs of the agricultural sector in Nigeria. In other words, diaspora remittances have long run effect on the growth of the sector in Nigeria.

Causality test

Ascertaining the direction of causal relationship is necessary at this point in order to properly identify the remittance variable that directly propels growth in each sector. The causality test is summarized below:

Table 3: Summary of the granger causality test

		F-statistics	Prob.
WREM does not Granger Cause AOP	30	2.67774	0.0884
AOP does not Granger Cause WREM		1.32066	0.2849
MREM does not Granger Cause AOP	30	6.08686	0.0070*
AOP does not Granger Cause MREM		2.99577	0.0682
EXR does not Granger Cause AOP	30	7.06128	0.0037*
AOP does not Granger Cause EXR		2.19722	0.1321

Note: * indicates that the p-value of the F-statistic is significant at the 5% level
Source: Researchers' Computation using E-view 9

The granger causality test above shows that migrant remittances (MREM) and exchange rate (EXR) granger causes agricultural output (AOP) only i.e. unidirectional causality. This is evident in the significant *p-values* of 0.0070 and 0.0037 respectively. Workers remittances showed bidirectional causal relationship with industrial output and services sector output (*p-values* = 0.0048 and 0.0270). The implication of these causal relationships shall be elaborately explained in the discussion of the findings.

Estimation of the model

Since the variables were found to be integrated at first difference all through, we confirmed the existence of a long run relationship through the Johansen cointegration test. What remains to be seen is estimation of the relationship between diaspora remittance variables and growth of the agricultural and, industrial sectors. Appropriately, the estimation tool is the error correction model having found the variables to be integrated at first order and cointegrated (Egbulonu, 2019). In addition, we shall estimate the long run speed of adjustment of the models in order to ascertain the long run convergence rate of the variables.

Error correction model estimation

The estimation of the Error Correction Model is necessary in order to reconcile the short-run behavior of remittances with its long-run behavior, and to investigate the adjustment mechanisms towards the long-run equilibrium, The speed of adjustment is our focus here as we try to show the dynamics of short run adjustments of remittances towards the long run equilibrium in relation with growth in the agricultural and industrial sectors in Nigeria

Table 4: Error Correction Model Result

	Error correction model estimates			
Model 1 (AOP)	**Coefficient**	***Std. Error***	**t-stat**	***p-value***
C	3.600185	4.944261	0.728154	0.4736
WREM	0.583365	0.211797	2.754357	0.0110**
MREM	0.299961	0.082163	3.650791	0.0013**
EXR	0.233288	0.223152	1.045423	0.3062
ECM(-1)	-0.064937	0.011677	-5.561103	0.0269**
R-squared = 0.9432; F-stat = 99.76 (p=0.000); DW = 1.346				

Note: * indicates that the p-value of the F-statistic is significant at the 5% level
Source: Researchers' Computation using E-view 9

The Table 4 above summarizes the relationship between diaspora remittance variables and output of the agricultural sector of the Nigerian economy. The models have similar coefficients especially for the diaspora remittance variables while the speed of adjustment show long run convergence. This implies that the short run model has good predictive properties. The findings made in the model estimation are elaborately discussed here-under.

Discussion of Results

The study set out to determine the relationship between diaspora remittances and economic growth from a sectorial growth perspective. Using data on workers remittances, migrant remittances, exchange rate, agricultural sector output, we embarked on test for stationarity since data are time series in nature. The stationarity test that was summarized in the Table 1 showed that the data were stationary at first difference which necessitated the test for long run relationship amongst the variables i.e. co-integration. The predictive characteristics of the data were confirmed as they were found to have long run relationship based on the Trace Statistic and Max-Eigen Statistic in Table 2. Thus, we proceeded with the Error Correction Model (ECM) estimation. However, prior to the error correction model estimation, the Granger causality test shown in Table 3 revealed that the current trend of movement in migrant remittances and exchange rate can be used to predict future output of the agricultural sector. This is a unidirectional causal relationship. Also, migrant remittances can be used to predict future output of the industrial sector as well. More interestingly, the current trend of inflow of workers remittances can be used to predict output of the industrial services sectors which is a confirmation of bidirectional causal relationship.

Furthermore, and most importantly, the Ordinary Least Square (OLS) estimates were presented with the Error Correction Model variant in Table 4 in order to show the relationship between diaspora remittances and sectorial growth in Nigeria. The result revealed that workers remittances and migrant remittances including exchange rate increased agricultural output by 0.5834, 0.2999 and 0.2333 units respectively (See Table 4). These represent positive and direct relationships between the three diaspora remittances variables and growth of the agricultural sector. The probability values of workers and migrant remittances (*p-values* = 0.0110 and 0.0013) means that the increase in agricultural output occasioned by workers and migrant remittances was significant. Exchange rate with p-value of 0.3062 did not significantly affect diaspora remittances in the first model (See Table 4).

The error correction coefficient was estimated at -0.0659, -0.0858 and -0.0874 for the agricultural sector (See Table 4). This means that the diaspora remittances – sectorial growth models corrects their previous period's disequilibrium at an estimated speed of 6.59 per cent, 8.58 per cent and 8.74 per cent annually.What this implies is that given a steady state of increase in diaspora remittances by less than 10% annually, the outputs of the agricultural, industrial and services sectors will experience positive growthand attain equilibrium in the long run.

Evaluation of Research Hypotheses

Test of hypothesis one

H_{01}: Migrant remittances do not have significant effect on the agricultural sector output in Nigeria.

	Agricultural sector
t-statistics	3.6508 (p-value = 0.0013)
Decision	Reject null hypothesis

Decision Rule: Since the probability values of the t-statistics in the three models are less than 0.05 critical value, we reject the null hypothesis and conclude that migrant remittances have significant effect on the agricultural sector output in Nigeria.

Test of hypothesis two

H_{02}: Workers remittances do not have significant effect on the agricultural sector output in Nigeria.

	Agricultural sector
t-statistics	2.7544 (p-value = 0.0110)
Decision	Reject null hypothesis

Decision Rule: The probability values of the t-statistics in the three models are less than 0.05 critical value, therefore, we reject the null hypothesis and conclude that workers remittances have significant effect on the agricultural sector output in Nigeria.

CONCLUSION, RECOMMENDATION AND POLICY IMPLICATIONS

This study analyzed the effect of diaspora remittances on the growth of agricultural sector of the Nigerian economy. The conclusion emanating from the findings is that both migrant and workers' remittances have had direct positive and significant effect on growth of the agricultural sector of the Nigerian economy. This

serves as a boost to the Nigerian economy because through these remittances, households and individuals are able to invest in the agricultural sector thus augmenting government efforts in sustaining output from the sector. Interestingly, based on the value of the model coefficients, the quantum of workers remittances inflow was found to be high for the agricultural sector. Agricultural sector grew even with the absence of remittances. The general conclusion is that remittances have helped to increase output of the agricultural sector in Nigeria for the period 1990 – 2021. In line with findings made in this research, we recommend the following:

Since workers remittances are aimed at supporting consumption needs of the beneficiaries in Nigeria, and since they were found to positively enhance growth of the agricultural sectors, government should tap into this positive development by intensifying technical exchange programmes between Nigeria and other advanced of the world. This will create the needed synergy and will make Nigeria to reap greater rewards from her vast human and material resources which will further enhance household consumption expenditure and enhance the multiplier effect in the economy.

The positive and significant effect of migrant remittances on the agricultural sector means that government should create a database of migrants through the diaspora missions so as to keep record of all migrant remittances which will help the federal government in policy formulations that will benefit Nigerian migrants in the long run.

The long run effect of diaspora remittances on the various sectors should be explored by the Nigerian government by way of making favorable exchange rate policies that will further boost the remittances from Nigerians resident abroad through official channels.

Nigeria's exchange rate was found to encourage remittances inflow into the economy. The direct causal relationship between remittances and economic growth was positively moderated by exchange rate. Thus, the monetary authorities should work assiduously to stabilize the naira exchange rate to the US dollar by encouraging local production in the agricultural sectors

Policy Implications

The policy implications of the findings made in this research are not far-fetched.

Firstly, the positive effects of the diaspora remittances inflow into the agricultural sector should propel the government to effect and immediate monetary control by way of sterilizing the financial inflows to guard against potential inflation. This implies that given increased remittances into the various sectors, the monetary authority (Central Bank of Nigeria) should monitor money supply and ensure stability to avoid further inflationary trends.

With knowledge of increased inflow of workers remittances to the agricultural sector, policies that will sustain industries in Nigeria should be advanced so as to encourage these private investments that will boost growth in the economy.

One vital aspect of the findings made in this research work is the intervening effect of exchange rate on the remittances – growth model. The Central Bank of Nigeria should strengthen the foreign exchange policies because exchange rate encourages remittances into the agricultural sector. Thus, there is bound to be misrepresentation of the usage of these remittances at the point of transmission which would now be utilized for other purposes which was not rightly stated. Unifying exchange rates will limit remittances through informal channels.

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PERFORMANCE MOTIVATION AND SOCIOECONOMIC CHARACTERISTICS: THE CASE OF THE EXTENSION AGENTS IN IMO STATE, NIGERIA

Ukoha, Elizabeth Obasi
Department of Agricultural Economics and Extension, Faculty Of Agriculture, Abia State University Uturu.
Corresponding author: obasiukoha@yahoo.com

ABSTRACT
This study was carried out to examine how the socioeconomic characteristics of the Extension Agents in Imo State, Nigeria, relate to their levels of motivation. A multistage sampling procedure was used to select 96 Extension Agents from Imo State for the study. First, two (2) Agricultural Zones, namely Owerri and Orlu, were randomly selected from the three (3) Agricultural Zones in the State. Secondly, eight (8) Extension Blocks were randomly chosen from each of the two (2) selected Agricultural Zones to give sixteen (16) Extension Blocks. Lastly, six (6) Extension Circles were randomly selected from each of the sixteen (16) Extension Blocks to give 96 Extension Circles and 96 Extension Agents for the study. A structured questionnaire was used for data collection, while descriptive and inferential statistics were employed to analyze the data. The findings showed that the male and female Extension Agents in Imo State had average levels of motivation of 3.26 and 3.18, respectively, and both were motivated to give the best of their service. Again, there was no significant difference in the motivation levels of male and female Extension Agents at a 5 % level of significance. The middle-aged {(40-49) years} Extension Agents were the most motivated age group among all the age brackets. The Extension Agents who hold B.Sc./B.A. AGRIC. had the highest level of motivation among all levels of education. With respect to work experience (WE), the most motivated group is the Extension Agents, who have 21-30 years of work experience. It was recommended that the Government should continue to give the male and female Extension Agents the same performance motivation incentives without preference for either sex. This is because our findings show that the two sexes were equally motivated. Motivation incentives should be graduated to favour more the middle-aged {(40-49) years} Extension Agents. This recommendation is tenable because it was found that the middle-aged {(40-49) years} Extension Agents had, on average, 3.27 points on motivation level and were the most motivated age group among all the age brackets. Furthermore, preference should be given to persons who hold B.Sc./B.A. Agric. when employing Extension Agents. This is because holders of B.Sc./B.A. Agric. had the highest level of performance motivation of 3.30 points compared with Extension Agents who hold other qualifications, namely OND and HND. Finally, motivation incentives should be graduated to favour the Extension Agents who have 21-30 years of work experience. Their average level of motivation is 3.26 points and is the highest among all years of work experience.
Keywords: Performance, Motivation, Socioeconomic, Characteristics, Extension, Agents.

INTRODUCTION

The role of agricultural extension agents is very essential to improving human resources (HR) of farmers which in turn can improve the national Human Development Index (HDI) (Listiana *et al.,* 2019). Extension agents act as a bridge, linking researchers, policy makers, agencies and communities/farmers in the process of knowledge and technology transfer to rural communities/farmers (Hauser *et al.,* 2016; Bader *et al.,* 2021). Agricultural extension brings about changes in farmers' attitude, knowledge and skills through education and communication and help farmers in decision making (Ali *et al,* 2012; Jeet *et al.,* 2020).

Adegebo (1993) enumerated the roles of extension agents to include, getting farmers in the right frame of mind to accept technological packages, helping farmers gain managerial skills to operate in a commercial economy by providing training and guidance to them in decision making on farm management and profitability, disseminate to the farmers the results of research and carry farmers production constraint back to research organization for solution. Other roles are formation of circles and sub-circles, selection of contact farmers, organization of field days, organization of farmers meeting, oversee that improved production technologies are effectively taught to farmers, and passing field problems to the appropriate authorities for solutions.

According to Machiadikwe *et al.* (2016) it is widely acknowledged that the motivation of workers, both in private and public organizations, leads to greater efficiency and effectiveness of workers, leading to higher productivity of the organization. To ensure high levels of motivation, administrators need to know and understand the socioeconomic characteristics of their employees.

Among the myriad of challenges confronting Nigeria today, food shortage is one of the greatest. According to Gutu (2016) one of the causes of this problem is the low morale and inefficiency among extension agents in transmitting information on agricultural production technologies to all the potential users who can adopt and produce food for their consumption and make available for others as well, which then in turn help to sustain socio-economic development in the long run.

The negative agency factors that affect field extension agents to include, lack of incentives for staff living in rural areas which normally lack amenities necessary for comfort and safety, transport allowances are not paid, housing facilities are not provided, no logistics for extension work and extension workers wallow in financial problems which affect performance. The absence of an effective extension system can lead to an impoverished rural life, uninformed farmers and an underdeveloped agricultural sector in a country (Jeet *et al.,* 2017).

In view of the problems highlighted in the preceding paragraphs, this study will provide answers to the following questions: (i) How does the gender of the Extension Agents in Imo State Agricultural Development Project (ADP) relate to the level of their performance motivation? (ii) Which age group of the Extension Agents have the highest level performance Motivation? (iii) What level of education of the Extension Agents is most motivated by the Imo State ADP motivation incentives? (iv) How many years of work experience of the Extension Agents is most motivated by the Imo State ADP performance motivation incentives?

The broad objective of the study was to analyze the socioeconomic characteristics of Agricultural Extension Agents in Imo State Agricultural Development Programme (ADP), in relation to their levels of motivation. The specific objectives are to: (i) examine how the gender of the Extension Agents in Imo State Agricultural Development Project (ADP) relate to the levels of their performance motivation; (ii) identify the age group of the Extension Agents with the highest level of performance Motivation; (iii) determine the level of education of the Extension Agents most motivated by the Imo State ADP motivation incentives; and (iv) find out the years of work experience of the Extension Agents most motivated by the performance motivation incentives of the Imo State ADP.

In order to achieve meaningful results, the following hypothesis expressed in null form was tested: $H_o : \bar{X}_M - \bar{X}_F = 0$. That is, there is no significant difference between the mean levels of the performance motivations of the male ($\bar{X}_M$) and female ($\bar{X}_F$) Extension Agents.

LITERATURE REVIEW

Theories of motivation fall into two categories: content theories and process theories. Content theories place emphasis on what motivates. Process theories are more concerned with how behaviour is initiated, directed and sustained or the actual process of motivation (Venugopalan, 2007). Major content theories are- Maslow's Hierarchy of Needs, McClelland's learned Needs Theory, McGregor's Theory X and Theory Y and Herzberg's Two-Factor Theory, while major process theories are – Expectancy Theory, Reinforcement Theory and Equity Theory. This study adopted the Equity Theory because is recognizes the role the socioeconomic characteristics of the Extension Agents play in their motivation.

Equity Theory

This theory was developed by J. Stacy Adams and George C. Homans. Equity theory states that a major input into job performance and satisfaction is the degree of equity or inequity that people perceive in their work situation. In simple terms, this theory states that equity occurs when the ratio of a person's outcome to his inputs equals to the ratio of another person's output to inputs. Inequity occurs when a person perceives that the ratio of his outcomes to inputs and the ratio of a relevant other's outcomes to inputs are unequal. Here, the inputs include: education, social status, qualifications, age, organizational positions, training and working conditions and outcomes include rewards such as pay, promotion, statue, recognition and the intrinsic interest in the job) of a person and others are based on the person's perceptions (Onuoha, 1991).

Equity theory assumes that people assess their performance and attitudes by comparing both their contribution to work and the benefits they derive from it to the contributions and benefits of another person. Equity theory further states that a person is motivated in proportion to the perceived fairness of the

rewards received for a certain amount of effort as compared to others. The theory recognizes that individuals are concerned not only with the absolute amount of rewards they receive for their efforts, but also with the relationship of this amount to what others receive. People make judgments as to the relationship between their inputs and outcomes and the inputs and outcomes of others (Venugopalan, 2007).

Equity theory tells that individuals are motivated to reduce any perceived inequity. They strive to make the ratios of outcomes to inputs equal. When inequity exists, the person making the comparison strives to make the ratios equal by changing either the outcomes or the inputs, thereby return to a condition of equity (Venugopalan, 2007).

Empirical Reviews

Machiadikwe *et al*. (2016), carried out a study determine the level of Extension Agents' motivation and effectiveness in Abia State, Nigeria. Multistage Sampling procedure was adopted in the study to select a sample size of 120 Extension Agents. Data for the study were collected with the aid of a structured questionnaire. The level of motivation of Extension Agents was measured on a five point Likert rating Scale. The data collected were analyzed using descriptive statistics, namely frequencies and means. The results show that the Extension Agents were highly motivated through salary advance (mean score = 4.63) and job security (mean score = 4.26). Fairly high level of motivation was scored by regular payment of salary (mean score = 3.97), regular promotion (mean score = 3.87), reward for good performance (mean score = 3.59), job satisfaction (mean score = 3.46) and regular payment of salaries (mean score = 3.2).

Yaser and Ajeili (2022), carried out a research to determine the level of motivation of Agricultural Extension Agents towards training and career in general, and each of the following personal and functional characteristics: (age, gender, educational attainment, job title, specialization in agricultural extension, length of employment service, occupational stability, attitude towards participation in training). The study population were all workers in agricultural extension in Nineveh Governorate and a sample of 125 respondents were used for the study after (20) respondents were taken as an exploratory sample for the purpose of measuring the reliability of the scale using the Alpha Cronbach method, where The value was (0.81%). The questionnaire was used as a means of collecting the necessary data from the respondents. `T-test, Pearson correlation coefficient, and Spearman's reliability coefficient were used in data analysis. The results showed that (62.2%) of the researchers were moderately motivated towards occupational training, (20%) were highly motivated towards Occupational training, and (16.8%) of the workers had low motivation and the level of motivation towards training in general is medium.

Apantaku and Apantaku (2015). Did a study to determine the relationship between motivation - hygiene factors and job satisfaction of village extension agents of Ogun State Agricultural Development Programme (OGADEP). They measured the order of importance of specific motivation and hygiene factors and the level of job satisf action, motivation and maintenance (hygiene factors) of the Village Extension Agents. The results showed significant relationships between motivation- hygiene factors and job satisfaction. The motivation factors ranked highest were opportunity for promotion and growth, and opportunity for more training and development. The hygiene factors with the highest preference were attractive salary and good working conditions.

METHODOLOGY

This study was conducted in Imo State of Nigeria. The population of the state stood at 3,927,563 persons, (males: 1,976,471 and females: 1,951,092) (NPC, 2006). The State has a land area of 5,530km^2 and is located between latitudes $4^0 45'$ N and $7^0 15'$ North of the Equator and between longitudes $6^0 50'$ E and $7^0 25$ East of the Greenwich Meridian (NRCRI, 2003). Imo State is made up of twenty seven Local Government Areas (LGAs) which are subsumed into three Agricultural Zones namely: Owerri, Orlu and Okigwe. The three Agricultural Zones of the State are broken down into Blocks. Again each Block is further broken down into Circles. Owerri Agricultural Zone has 18 Blocks and 139 Circles, Orlu Agricultural Zone has 10 Blocks and 107 Circles and Okigwe Agricultural Zone has 10 Blocks and 80 Circles. In all, Imo State is made up of 38 Blocks and 326 Circles (Nnadi & Anaeto, 2013). Imo as an agrarian State is richly endowed with land suitable for growing various tropical cash crops such as oil palm, cocoa, coconut, banana/plantain and pineapple, and food crops such as cassava, yam, maize, rice, cocoyam and sweet potato. Livestock reared include goats, sheep, pig and poultry.

The population for this study comprised of all the Extension Agents in Imo State ADP. Multi-stage random sampling technique was used to select 96 Extension Agents for the study. First, two (2) Agricultural Zones, namely Owerri and Orlu were randomly selected from the three (3) Agricultural Zones

in the State. Secondly, eight (8) Extension Blocks were randomly selected from each of the two (2) selected Agricultural Zones, to give sixteen (16) Extension Blocks. Lastly, six (6) Extension Circles were randomly selected from each of the sixteen (16) Extension Blocks, to give 96 Extension Circles. The Extension Agents manning each of the selected Circles were selected to serve as respondents for the study. Thus, ninety six (96) Extension Agents were sampled for the study.

Primary data were used in this study. The data were collected from Extension Agents using structured questionnaire. Data were collected on the socio-economic characteristics and level of motivation of the Extension Agents.

To examine how the EA's gender relate to the levels of their performance motivation, descriptive statistics such as frequencies, percentages and means were used in data analysis. To facilitate the realization of this objective, the Extension Agents levels of motivation were measured on a four (4) point Likert rating scale. The responses, in descending order of importance were scored 4 to 1 points as follows: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1).

In order to achieve meaningful results, the following hypothesis expressed in null form was tested: $H_o : \bar{X}_M - \bar{X}_F = 0$. That is, there is no significant difference between the mean levels of the performance motivations of the male $(\bar{X}_M)$ and female $(\bar{X}_F)$ Extension Agents.

This hypothesis was tested using z-test statistics for the difference of means. The test statistic is given by (Spiegel, 1972):

$$z = \frac{\bar{X}_M - \bar{X}_F}{\sqrt{\frac{\delta_M^2}{N_M} + \frac{\delta_F^2}{N_F}}}$$

Where; z is the z test statistics, $\bar{X}_M$ is the mean score of the performance motivation of the male Extension Agents from their Likert Scale rating, $\bar{X}_F$ is the mean score of the performance motivation of the female Extension Agents from their Likert Scale rating, N_M and N_F are respectively the number of male Extension Agents and female Extension Agents. The terms δ_M^2 and δ_F^2 are the variances of the mean performance motivation levels of the male and female Extension Agents, respectively. The z – test was carried out at the 5% level of significance.

To identify the age group of the Extension Agents with the highest level of performance Motivation, the Extension Agents were grouped into classes according to their ages and their average performance motivation, and the results compared. Descriptive statistics such as means, percentages and frequencies were used in data analysis. Similarly, the level of education of the Extension Agents which is most responsive to the Imo State ADP motivation incentives was determined using descriptive statistics namely means, percentages and frequencies.

Finally, the years of work experience of the Extension Agents most motivated by the performance motivation incentives of the Imo State ADP was determined by grouping the EXTENSION Agents into classes and analyzing the data collected with descriptive statistics.

RESULTS AND DICUSSIONS

Gender and the Levels of Motivation of Extension Agents in Imo State.

The sampled Extension Agents were classified into males and females. Then the average scores of the male and female Extension Agents on their levels of motivation were computed and compared. The results were presented on Table 1.

Table 1: Distribution of Sampled Extension Agents according to Gender and motivation Levels

s/n	Sex	F	%	AV	Bench Mark	Inference
1.	Male	62	64.58	3.26	2.5	Accept
2.	Female	34	35.42	3.18	2.5	Accept
	TOTAL	**96**	**100.00**	**-**	-	-

Source: Computed by the Researcher with survey data collected in 2022. Where F= Frequency and AV= Average score.

From Table1, the male and female Extension Agents had average levels of motivation of 3.26 and 3.18 respectively. Since these figures are above the bench mark value of 2.50, we conclude that both the male and female Extension Agents in Imo State were motivated to give the best of their service. Next, we tested

for significant difference in the levels of motivation of male and female Extension Agents. The results of the test are presented on Table 2 and discussed.

The hypothesis tested is: $H_o: X_M = X_F = 0$. (I.e. there is no significant difference between the mean levels of motivation of the male and female Extension Agents in Imo State). The computed z-statistic (Z_C), has a value of 0.73 and the theoretical or critical value (Z_T) of the test at 5 percent level of significance is ±1.96. Since the computed z –statistic (Z_C) is less than the theoretical or critical value (Z_T), we accept the null hypothesis at 5% level. That is, we infer that the difference in motivation levels of male and female Extension Agents is not statistically significant at 5 % level. See the result of the test on Table 2.

Table 2: Test for Difference in the Mean Levels of Motivation of Male and Female Extension Agents in Imo State (Two-tailed Ƶ -test).

s/n Item	Male Extension Agents	Female Extension Agents	Critical values/Decision rules /Inference
1. Mean levels of motivation	3.26	3.18	-
2. Standard deviation	0.37	0.39	-
3. Sample size	34	62	-
4. Normality test	21.238 [0.0000]**	8.1302 [0.0172]*	-
5. Computed Ƶ–statistic at 5% α-level (Z_C)		0.73	
6. Theoretical Ƶ-statistic at 5% α-level (Z_T).		±1.96	
7. Decision rule			Since $Z_C < Z_T$ we accept the null hypothesis at 5% α-level.
8. Inference			The difference in motivation levels of male and female Extension Agents is not significant at 5 % α-level.

Source: Computed by the Researcher from Survey data, 2022.

Note: ** means significant at 1 percent level and • means significant at 5 percent level

Age and Levels of Motivation of the Extension Agents

Here we analyzed the ages of the Extension Agents into age groups, namely youths, middle age and old people, and determine the age group among the Extension Agents which was most motivated by the incentives. The results were presented on Table 3. The highest level of motivation was 3.27 points and was scored by the middle-aged Extension Agents. The middle-aged Extension Agents are in the prime of their career and they exploit all available opportunities to rise to the top of their career. This explains the reason why their response to the performance motivation incentives had the highest average score among the other age groups. The older Extension Agents had an average motivation level of 3.16 points, which is second in rank to the motivation level of the middle-aged group. This is probably because the older Extension Agents are preparing for retirement and may not be as effective as before, due to the effect of age on them. The youth farmers (30-39 years) had the lowest level of motivation (2.90 points). This is probably because some of the young Extension Agents are looking for better opportunities elsewhere and take the extension job as a temporary assignment.

Table 3: The Distribution of the Extension Agents according to Age and level of Motivation.

S/n	Age Bracket	F	%	Average Level of Motivation
1. Youth Age	30-39	1	1.04	2.90
2. Middle Age	40-49	44	45.83	3.27
3 Older Age	50-60	51	53.13	3.16
TOTAL =		**96**	**100**	

Source: Computed by the Researcher from Survey data, 2022. F = Frequency.

Education and Levels of Motivation of the Extension Agents

The Extension Agents were classified into three groups according to their levels of education, namely holders of Ordinary National Diploma (OND), Higher National Diploma (HND) and Bachelor of Science (B.Sc.)/Bachelor of Agriculture (B. Agric.), respectively. The average level of motivation was computed for each level of education and presented on Table 4. From the table, the Extension Agents who hold B.Sc. /B.A. Agric. had the highest level of motivation of 3.30 points. This result is expected because the university graduates man and coordinate the extension programme in Nigeria, and the Extension Agents who are university graduates are motivated by the expectation of moving up the rank and file to management level.

Table 4: The Distribution of the Extension Agents according to their level of Education and level of Motivation.

S/n	Level of Education	F	%	Average level of Motivation
1.	OND	30	31.25	3.20
2.	HND	53	55.21	3.20
3	B.Sc./B.A. AGRIC.	13	13.54	3.30

Source: Computed by the Researcher from Survey data, 2022. Note: F stands for frequency.

Work Experience and the Level of Motivation of Extension Agents in Imo State.

The Extension Agents were grouped according to their work experience, as shown on Table 5. All the groups had average level of motivation above the bench mark value of 2.50 points. This means that the Extension Agents were all motivated by the incentives provided by their employer. However, the most motivated group is the Extension Agents who had 21-30 years work experience. Their average level of motivation is 3.26 points and was ranked 1. This group has spent many years in service and is well experienced in the job. Therefore, they need little incentives to do their best on the job. This factor probably accounted for their highest level of motivation. The second position in motivation was attained by Extension Agents with 10-20 years work experience. Their average level of motivation is 3.23 points. The third position in motive was attained by two work experience groups, namely those who have worked for 1-10 and 31-35 years. The average level of motivation of each group is 3.04 points**.**

Table 4.5: The Distribution of the Extension Agents according to their Work Experience and level of Motivation.

S/n	Work Experience	F	%	Average Level of Motivation	Rank
1.	1-10	5	5.21	3.04	3
2.	11-20	48	50.0	3.23	2
3	21-30	33	34.38	3.26	1
TOTAL =		**96**	**100**		

Source: Computed using survey data, 2022. Note: F= frequency.

CONCLUSIONS AND POLICY IMPLICATIONS

This study analyzed the levels of motivation of the Agricultural Extension Agents in mo State, with respect to their socioeconomic characteristics. The population for the study comprised of all the Extension Agents in the three Agricultural Zones in Imo State. Through multistage random sampling technique, a total of 96 Extension Agents were selected for the study. Structured questionnaire was used in data collection. Descriptive statistics were used in data analysis.

The major conclusion of the study was that both the male and female Extension Agents in Imo State were equally motivated in their job performance by the incentives they received from the government. Other conclusions were that the middle-aged {(40-49) years} Extension Agents were the most motivated age bracket, the Extension Agents who held B.Sc./B.A. Agric. had the highest level of performance

motivation among all qualifications and the Extension Agents who had 21-30 years work experience were most motivated compared with other years of working experience. The above conclusions have the following policy implications: The Government should continue to give the male and female Extension Agents the same performance motivation incentives without preference to either sex. This is because our findings show that the two sexes were equally motivated. The motivation incentives should be graduated to favour more, the middle-aged {(40-49) years} Extension Agents. This recommendation is tenable because it was found that the middle-aged {(40-49) years} Extension Agents had on average,
3.27 points on motivation level, and were the most motivated age group among all the age brackets. When employing Extension Agents, preference should be given to persons who hold B.Sc./B.A. Agric. Extension, compared With Extension Agents who hold other qualifications, namely OND and HND. This is because holders of B.Sc./B.A. Agric. Extension had the highest level of performance motivation of 3.30 points, compared with Extension Agents who hold other qualifications, namely OND and HND. Performance motivation incentives should be graduated to favour more, the Extension Agents who have 21-30 years work experience. Their average level of motivation is 3.26 points, and is the highest among all years of work experience.

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AGRICULTURAL INPUTS AND AGRICULTURAL PRODUCTIVITY IN NIGERIA

Uzuegbu, Chinyere F., Uzuegbu, Chibuzo J., Alugbuo, Justin C. and Anumudu Charles N.
Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.
Corresponding Author's Email: uzuegbu.chibuzo@mouau.edu.ng

ABSTRACT
The study investigated effect of agricultural inputs on agricultural productivity in Nigeria for the period 1981 – 2021. It seeks to ascertain the effect of agricultural inputs on agricultural productivity in Nigeria and whether there is a sustainable long run relationship between agricultural inputs and agricultural productivity in Nigeria. The Ordinary Least Square (OLS) estimation technique was used for estimation, time series data were obtained from Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS). Results showed that agricultural inputs had a significant effect on agricultural productivity at 5% level of significance while the Johansen co-integration test indicated a long run relationship between Agricultural Productivity (AGOUT), Agricultural Credit Guarantee Scheme Fund (ACGSF), Commercial Banks' Loans and Advances to Agricultural Sector (CBLAAS) and Total Rainfall (RNFL). Based on the above findings, the study recommended among others that there is need to increase agricultural credit guarantee scheme fund as it has effect on agricultural productivity and to sustain commercial banks loans and advances to agricultural sector as it has a significant effect on agricultural productivity in Nigeria.
Keywords: Agricultural Inpus; Agricultural Productivity; Agricultural Sector; Agricultural Credit Guarantee Scheme

INTRODUCTION

Agricultural production in Nigeria is progressively on the decline in terms of its contribution to the Gross Domestic Product (GDP) as well as satisfying the country's food requirement, despite the fact that about 70 per cent of the population engage in agriculture. This inability of Nigeria agricultural sector in fulfilling its most basic role of being the source of food for the nation has led to a continuous rise in food importation (Odigbo, 2000). There is a growing recognition by the Nigerian farmers of the effect of improved inputs and new technologies on agricultural field. The use of these inputs and the adoption of high yielding techniques have given rise to an increased need for agricultural credits. In order to improve agricultural production, modern farm inputs such as fertilizers, improved seed, feeds and plants protection, chemicals and machineries are needed. Agriculture contributes to the Nigerian economy in ways like, provision of food, supply of adequate raw materials to a growing industrial sector, a major source of employment, generation of foreign exchange earnings, and provision of a market for the products of the industrial sector (Okumadewa, 1997); World Bank, 1998; Winters et al, 1998; FAO, 2006).

The agricultural exports include cocoa, beans and products, rubber, cotton, processed skin etc (Okoro & Ujah, 2009). These agricultural products account for about 3.97 per cent of the total non oil exports in 2007 (CBN, 2007). The import export gap has been widening since 1999 and this puts the agricultural policy of the nation to question. This situation provides a unique opportunity for closing up this agricultural deficit through functional policies and budgets (Okoro & Ujah, 2009).

Although Nigeria depends heavily on the oil industry for her revenues, Nigeria is predominantly an agrarian society which the sector contributed about 42 per cent of real GDP in 2008 (CBN, 2008). The working population data indicates that growth rate of agriculture working population seems to be the driver of the growth rate in total working population. For instance, the growth rate of agriculture working population dropped from 3.73 percent in 2003 to 1.94 per cent in 2007, while that of the total working population dropped from 4.46 per cent in 2003 to 3.25 per cent in 2007 (Ujah & Okoro, 2007). The high correlation between growth rates of total working population and agriculture working population suggests that agriculture holds the potential for tackling unemployment in the country at least in short run.

Despite all government's efforts in improving agricultural production through agricultural credit etc, agricultural production has not yet improved. Governmental programmes that were set up in improving agricultural credit and production in Nigeria include: Agricultural Credit Guarantee Scheme (ACGS), which was formed in 1977 with the objective of encouraging financial institutions to lend funds to farmers, Agricultural Development Programmes (ADP) which was designed to enhance the production of Agricultural outputs, Agricultural Project Monitoring and Evaluation Unit (APMEU) which was designed

for monitoring and evaluation ADPs units and Federal Agricultural Coordinating Unit (FACU), which provides technical assistance to the ADPs in agriculture and infrastructure; undertake studies, and prepare new projects.

In 1981 credit was 35,642 and output was 2,364.37 billion and in 1990 credit was 98,494.50 while output was 3,464.72 billion. From 1981 to 1990, there were increases in loans guaranteed and outputs. In 1991 credit was 79,107.40andoutput was 3,509.84 billion and in 2000 credit was 361,449.00 while output was 4,840.97 billion. In 2001 credit was 728,545.40 and output was 5,024.54 billion and in 2010 credit was 7,840,496.63 while output was 13,048.89 billion. From 2001 to 2010, there were substantial increases in the value of loans guaranteed and agricultural output.

In 2011 credit was 10,028,988.81and output was 13,429.38 billion and in 2015 credit was 10,857,380.83 and output was 15,952.22 billion. From 2011 to 2015, there was no much difference in the credits guaranteed due to fluctuations in the value of loans guaranteed under Agricultural Credit Guarantee Scheme, but in the agricultural outputs there were little increases between 2011 and 2015, (CBN Statistical Bulletin, 2015 and National Bureau of Statistics).

In spite of the efforts of government through these programmes in improving the credits given to farmers, agricultural output has not improved. There is over dependence on importation of agricultural products. Nigeria has consistently spent less than 5 per cent of its annual budget on agriculture. Some African countries such as Ghana, Uganda and Malawi have stabilized their budget expenditure on agriculture around 10 per cent. Malaysia on the other hand, has achieved accelerated agricultural development through sustained annual expenditure between 20-25 per cent of its budget on agriculture in the last three decades (Youngstars Foundation, 2010). This poor annual budgetary allocation to the agricultural sector also contributes to the sector's low productivity.

LITERATURE REVIEW

Conceptual Literature

The primary interest of the study is to examine the impact of agricultural credits on agricultural productivity in Nigeria. The goal of agricultural development of any country is to boost food production in order to attain food security. The attainment of this goal is impossible if the farmers have no resources to produce with. Therefore, the provision of agricultural credits to the farmers is a must if the goal is to be achieved. The empowerment of farmers is to provide agricultural credits. Warren (2001), explained that agricultural credits is the economic study of the acquisition and use of capital in agriculture. It deals with the supply of and demand for funds in the agricultural sector of the economy. From this definition, one could say that agricultural credit is the amount of investment funds made available for agricultural production. These resources could be in the form of cash or kind. The resources in cash could be loans from government, commercial banks, saving and cooperative societies. While the resources in kind could be, by supply of inputs to farmers by the government and non-governmental agencies who are interested in agriculture or food production. However, the availability of food at the right quantity and quality cannot be compromised. Therefore, agricultural credit facilities need to be improved. The agricultural sector needs finance to survive.

The government established the Nigerian Agricultural Cooperative and Rural Development Banks (NACRDB) in 1973 in order to enhance credit flow to the sector. However, with the establishment of NACRDB, the challenge of poor credit supply still remained. This is an indication that the budgetary allocation to NACRDB was insufficient for the credit needs of the sector (Akinyele, Akanni and Oladoja, 2003). According to Zakaree (2014), in an attempt to address this issue, the government established the Agricultural Credit Guarantee Scheme (ACGS) in 1977 to encourage commercial banks to increase credits' supply to the agricultural sector by providing guarantees against inherent risk in agricultural lending. Akinyele *et al.* (2013), asserted that despite several years of the establishment of the Agricultural Credit Guarantee Scheme (ACGS), the level of commercial banks' involvement is yet uncertain. Nigeria with natural endowment is yet relying on massive importation of basic food and industrial raw materials.

Role of Credit in Agricultural Development

Agricultural development means providing assistance to the farmers with the help of various agricultural resources to boost production. Efficient and effective credit is used for the adoption of new technology by farmers which in turn boost agricultural activities. Murshid and Rahman (1991), indicated that agricultural growth occurs through capital accumulation and technical charges. Most of the high yielding technology has been a vehicle of growth in agriculture. Galbraith (1952), recognized the vital role of credit which he described as a catalyst in stepping up agricultural production. Credit has been said to propel the

transition from traditional agriculture towards modernization and commercialization. This transformation from traditional to modern agriculture will inspire farmers towards better nutrition, health, better housing and education for the farm family (Nweke; 1986).

Theoretical Literature

Linear stages of growth

Prof. Rostow described five stages of economic growth through which all developing countries pass through. The Traditional Society: It is the basic stage of economic development which is characterized by subsistence agriculture. The labour force depends upon agriculture and there is less mobility of factors of production.

Pre-Conditions to "Take-Off"

In the second stage of economic growth, an economy undergoes a process of change for building up conditions for growth and take-off. According to Rostow, these changes in society and the economy had to be of fundamental nature in the socio-political structure and production techniques. There are three important dimensions to this transition: Firstly, is the shift from an agrarian to an industrial or manufacturing society? Secondly, trade and other commercial activities of the nation broaden the markets. Lastly, the surplus attained should not be wasted by the land owners or the state, but should be spent on the development of industries, infrastructure and thereby prepare for self-sustained growth of the economy. This strategic factor is that investment level should be above 5 per cent of the national income. Accordingly, to Rostow, capital formation depends on the productivity of agriculture and creation of capital. Agriculture plays an important role in this transition process as the surplus quantity of the produce is to be utilized to support an increasing urban population of workers. Increases in agricultural productivity also led to expansion of the domestic markets for manufactured goods and foreign income, investment, production and purchasing power begin to increase.

The Take Off

According to Rostow, take off period is normally 20 to 30 years. In this stage, all the obstacles of development are controlled, the rate of economic development increases, new markets are found, new industries are stabilized and the latest technology is used in the various sectors of the economy. The ability of a country to make it through this state depends on these factors.

A sustained effective demand for the product of key sectors, introduction of new production technologies and technique of the sectors, the society's increasing capacity to generate or earn enough capital to complete the take-off transition and activities of the key sector should induce a chain of growth to other sectors of the economy that also develop rapidly.

Drive to Maturity

After takeoff, there follows a long interval of sustained growth known as the stage of drive to maturity. Rostow defines it "as the period when a society has effectively applied the range of modern technology to the bulk of its resources. Some 10 – 20 percent of the national income is steadily invested, permitting output to regularly exceed the increase in population, new industries accelerate, the economy finds its place in the international economy; goods formerly imported are produced at home and labour force composition in agriculture shifts from 75 percent of the working population to 20 percent.

The Age of High Mass Consumption

In this stage of economic growth, prosperity is being found in the country. The per capita income is high and people can save easily after meeting the basic necessities. Rural population moves to urban areas, durable goods like cars and machines are produced in the country, colleges and universities are available in large number.

Structural Change Theory

This theory was postulated by Arthur W. Lewis in the mid-1950s. The theory focuses on the mechanism by which underdeveloped economies can transform their domestic economic structures from a heavy emphasis on traditional subsistence agriculture to a more modern and advanced agricultural practice through heavy financial support in order to attain industrial breakthrough. The extended version added that the full benefits of agricultural development cannot be realized unless government support systems are created to provide the necessary incentives,economic opportunities and most importantly, access to needed credits and inputs to enable small scale farmers expand their outputs and raise their productivity. Wiggins explains that agricultural financial incentives can play a dual role in the process of economic development. Firstly, it will produce more food and also produce many great jobs needed.

The Classical Theory of Growth

Adam Smith who is the foremost classical economist identified major sources of growth. The sources include:

- Technological Changes: Technological changes brought about innovations that introduces new products, new ways of producing existing products and new forms of business organizations. These can be achieved if farmers are provided with capital in order to purchase improved inputs and new technologies.
- Investment in Human Capital: A country with high percentage of educated labour force will experience faster economic growth than a country with a low percentage. Since about 70 per cent of the Nigerian population engage in agriculture, if these people are educated, there will be faster economic growth and the productivity of the sector will increase.

Empirical Literature

Udih (2021), investigated banks' credits and agricultural development. The paper used primary and secondary sources of information that were extracted from five (5) banks and ten (10) agricultural enterprises in Delta State. A simple random sampling technique through the lottery method was adopted to test the hypotheses. The research finding include: that banks' credits and advances to agricultural entrepreneurs promotes agricultural development and productivity and that regulated banks' credits to the agricultural entrepreneurs have no or little impact on the entrepreneurship performance. Thus, he suggested that adequate banks' credits should be granted to small scale farmers in order to increase productivity, and their farmlands should be used as collateral. Uger (2020) used a time series data from 1991 to 2018, employing the OLS model to examine the effect of government expenditure on agricultural sector. The findings revealed that there is a positive but insignificant relationship that existed between government expenditure and agricultural output in Nigeria. Nafisat (2017) used an ordinary least square (OLS) estimation technique for the period of 1977 to 2016 to examine the impact of government expenditure on agricultural output in Nigeria. The results revealed that agricultural output does not respond significantly to government expenditure on agriculture. It confirms that the government contribution to agriculture is not enough for its development. The study therefore suggested that government expenditure on agriculture should be increased. Oboh (2016) used error correction model to investigate farmers' allocative behavior in credit utilization in Benue State. The study revealed that the usefulness of any agricultural credit programmes do not depend only on its availability, accessibility and affordability, but also on its proper and efficient allocation and utilization for intended uses by beneficiaries. In spite of the importance of 1credit in agricultural production, its acquisition, management and repayment are replete with a number of problems.

Enga, and Alimba (2015) used OLS multiple regression model to examine the effect of commercial bank funding on the Nigerian agricultural sector from 1986 to 2013. The study revealed that agricultural sector repayment ability, cash reserve ratio and interest rate have a theoretical signs indicating that an increase in interest rate and repayment ability of the sector causes an increase in the amount of credit by commercial bank funding to the agricultural sector.

Rahman *et al.* (2014) used a logistic regression model to examine the effect of agricultural credit on agricultural productivity in Pakistan. The study revealed that there is a positive and significant relationship between agricultural credit and agricultural productivity. They concluded that timely provision of appropriate amount of loan to farmers is helpful for the enhancement of agricultural productivity as it enables farmers to purchase high yielding variety seeds, fertilizers and pesticides. Idoko (2012), used data from 1975 to 2010 to study the effect of government expenditure on agricultural output in Nigeria. They used an ordinary least square for the estimation. The variables for the study included foreign direct investment on agricultural sector, annual rainfall, government expenditure on agricultural sector, agricultural credit guarantee scheme fund, and commercial bank loans and advances to the sector. The result of the estimated OLS model revealed that, the relationship that existed between government expenditure on agriculture and Nigerian agricultural sector output was found to be significant and positive during the evaluation period. Ayaz and Hussain (2011) employed a stochastic Frontier Production Analysis (SFA) to examine the effect of credit availability to farmers in Pakistan. The study revealed that agricultural credit has a positive effect on agricultural output. They concluded that credit to agricultural sector has more constructive and significant impact on farmers' technical efficiency than other factors like farming experience, education and number of cultivation practices.

Rahji and Adeoti (2010) used Logit Model to identify the determinants influencing commercial banks' decision to ration agricultural credit in South-West, Nigeria. Data were sourced from the agricultural credit transactions of the banks. Evidence from the estimated logit model indicated that farm size of the

farmers, previous incomes, enterprises type and household net worth are significant but are negative factors influencing the banks' decision to ration credit. Hence higher values of these variables increase the likelihood of being credit rationed. Dong et al. (2010) used an endogenous switching regression model to examine the effect of agricultural credit on agricultural productivity in North East, China. The study revealed that the productivity and income of credit unconstrained farmers are higher than the credit constrained farmers.

METHODOLOGY

Model Specification

In order to estimate the effect of agricultural inputs on agricultural output, this study will use the Cobb-Douglas production function to analyze the data.

Q = f (L, K)

Where

Q = Total production of the inputs

L = Labour input

K = Capital input

This study will adopt the model by Uger (2017) in the empirical literature. The study used an OLS with a time series that covers between 1991 and 2016.

Y = f(x) ……. (1)

Y = βo + β1 x +ui…….. (2)

Where

Y = Agricultural output in Nigeria

X = Agricultural expenditure

ui = Error term.

With modification both in variable and time factor, this study intends to show the effect of agricultural inputs on agricultural output in Nigeria. The study will use an ordinary least squares (OLS) with a time series data that covers from 1981to 2021. The model for this study is implicitly stated as:

AGOUT = F (ACGSF, CBLAAS, RNFL)

Explicitly, the model is stated as:

$AGOUT = \beta_o + \beta_1 ACGSF + \beta_2 CBLAAS + \beta_3 RNFL + ui$

Where

AGOUT = Agricultural output

ACGSF = Agricultural credit guarantee scheme fund

CBLAAS = Commercial Banks' Loans and Advances to Agricultural Sector

RNFL = Total Rainfall

Stochastic error term. This will take care of other variables that have influence on agricultural output but are not specified in this model.

β_1 and β_2 are the coefficients of agricultural credit guarantee scheme fund and commercial banks' credit and advances to agricultural sector.

RESULTS

The analysis was carried out using four variables, one dependent variable and three independent variables. Agricultural output (AGOUT) was used as dependent variable while ACGSF, CBLAAS and RNFL were used as independent variables. Data were collected from CBN statistical bulletin, National Bureau of statistics and Nigeria Meteorological Agency.

Unit Root Test

This test tries to examine the property of the variables. It is used to check for the presence of a unit root i.e. no stationarity of the variables. This test is carried out using the Augmented Dickey Fuller (ADF) test. This is the first test carried out in the Cointegration analysis and is known as the pre Co-integration test. The ADF is carried out using E-views software package and the results from the test are tabulated below:

Table 1: Test for Stationarity

	AT LEVELS			At 1st DIFFERENCE			
Variables	**ADF Test statistic**	**Critical Value at 5%**	**Remarks**	**ADF Test Statistic**	**Critical Value at 5%**	**Remarks**	**Order of Integration**
AGOUT	1.972910	-2.957110	NS	-4.544087	-2.960411	S	I(1)
ACGSF	-1.950507	-2.960411	NS	-3.890507	-2.960411	S	I(1)
CBLAAS	-1.642663	-2.957110	NS	-4.851131	-2.963972	S	I(1)
RNFL	-5304134	-2960411					I(0)

Source: Author's Compilation from E-views 10

The a priori expectation when using the ADF test is that a variable is stationary when the value of the ADF test statistic is greater than the critical value at 5%. None of the variables used met this a priori expectation at all levels as they were non-stationary (NS) and as such were differenced once to become stationary (S). Thus AGOUT, ACGSF and CBLAAS integrated of order one while RNFL is integrated of order zero.

Johansen Co-integration test

The co-integration test is used to check for long run relationship between the dependent and independent variables. The co-integration test was carried out using the Johansen technique also using E-views software package and it produced the following results:

Table 2: Test for Johansen Co-integration Using Trace Statistic

Hypothesized No. of CE(s)	**Eigen Value**	**Trace Statistic**	**0.05 Critical Value**	**Prob.****
None *	0.808381	86.82273	63.87610	0.0002
At most 1	0.457610	32.60317	42.91525	0.2211
At most 2	0.306475	16.11962	25.87211	0.4830
At most 3	0.152745	4.554616	12.51798	0.6290

Source: Author's Compilation from Eviews10

From the above table the trace indicates one co-integrating equation at 5 percent level.

Table 3: Test for Johansen Co-integration Using Max-Eigen Value

Hypothesized No. of CE(s)	**Eigen Value**	**Max-Eigen Statistic**	**0.05 Critical Value**	**Prob.****
None*	0.808381	51.21956	32.11832	0.001
At most 1	0.457610	19.48355	25.82321	0.2740
At most 2	0.306475	11.34501	19.38704	0.4784
At most 3	0.152745	4.554616	12.51798	0.6290

Source: Author's Compilation from Eviews10

From the above table the Max-Eigen value indicates one co-integrating equation at 5 percent level. Based on the above tables we reject the null hypothesis of no cointegrating equations.

Table 4: Long run Normalized Co-integration Estimates

LRAGOUT	**ACGSF**	**CBLAAS**	**RNFL**

1.000000	0.060263	0.723011	-0.006284
	(0.05932)	(0.08449)	(0.00146)
	[1.00689]	[8.55736]	[4.25411)

Source: Author's Compilation from Eviews10

The above table shows the normalized co-integration co-efficients with the standard error and t-statistic in parentheses ( ) and [ ].

There is an inelastic relationship between LRAGOUT and ACGSF. A unit change in agricultural credit guarantee scheme fund (ACGSF) will bring about a less than proportionate change in long run agricultural output (LRAGOUT). The t-statistic shows the significance of the independent variable with respect to the dependent variable in the long run. The rule of thumb for t-statistics states that t ≥ 2 is significant. Therefore ACGSF is statistically insignificant at 1.00689.

There is an inelastic relationship between LRAGOUT and CBLAAS. A unit change in commercial bank loan and advances to agricultural sector (CBLAAS) will bring about a less than proportionate change in LRAGOUT. The rule of thumb states that t ≥ 2 is significant. Therefore CBLASS is statistically significant at 8.55736.

There is positive relationship between LRAGOUT and RNFL. A unit increase in rainfall (RNFL) will bring about a 0.006284 increase in LRAGOUT. This meets a priori expectation of a positive relationship between rainfall and agricultural output. The rule of thumb states that t ≥ i2. Therefore RNFL is statistically significant at 4.250411.

Test of Hypothesis

H0: Agricultural inputs do not have a significant effect on agricultural output in Nigeria

Result of Regression Analysis with EViews 10

Dependent Variable: AGOUT

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	145.8045	10.95743	13.30646	0.0000
ACGSF	1.668705	0.000193	-0.085732	0.0325
CBLAAS	1.946705	8.347606	2.325182	0.0307
RNFL	1.117805	0.000565	-0.108270	0.0149
R-squared	0.762647	Mean dependentvar		2069160
Adjusted R-squared	0.715176	S.D. dependent var		67.22186
Durbin-Watson stat	0.466977	Prob(F-statistic)		0.000005

Source: Researcher's Compilation from Eviews 10

The result of the above analysis is as follows. The partial slope coefficient of 1.66 measures the agricultural output with respect to agricultural credit guarantee scheme fund. This number (1.66) states that, if agricultural credit guarantee scheme fund increases by 1 percent, agricultural output rate goes up by about 1.66 percent. Similarly, if commercial banks' loan and advances increases by 1 percent, agricultural output goes up to about 1.94. The analysis also shows that the increase in rainfall will also lead to an increase in agricultural output. 1 percent increase in rainfall will lead to 1.11 increase in agricultural output.

The R^2 of 0.7626 shows that about 76% of the variation in agricultural output is explained by agricultural credit guarantee scheme fund (ACGSF), commercial banks' loan and advances to agricultural sector (CBLASS) and rainfall (RNFL). The remaining 24% is as a result of other variables not captured in the model.

The estimated F-value is significant (because p-value is less than 0.05) we can strongly reject null hypothesis and accept alternative hypothesis and therefore conclude that agricultural inputs have significant effect on agricultural output.

CONCLUSION AND RECOMMENDATIONS

The objective of the study is to examine the impact of agricultural inputs on agricultural outputs. The agricultural development of any country is to boost food production in order to attain food security. The attainment of this goal is impossible if the farmers have no resources to produce with. Therefore the provision of agricultural credits to farmers is a must if the goal is to be achieved. Such credits includes

agricultural credit guarantee scheme fund and commercial banks' loan for agricultural sector. The result of the analysis shows that these determinants of agricultural output (agricultural credits guarantee scheme fund, commercial banks' loan to agricultural sector and rainfall) have significant relationship with agricultural output. However, the study concludes that agricultural inputs have significant impact on agricultural productivity. Based on our results we recommend the following policy guidelines:

i. There is need to increase agricultural credit guarantee scheme fund as it has effect on agricultural output and sustain commercial banks loan and advances to agricultural sector as it has a significant effect on agricultural output in Nigeria.
ii. Government should introduce new policies that will increase agricultural output in Nigeria.
iii. There is need for government to put in place policies to stimulate agricultural commercialization through cooperative system, agricultural subsidies and zero-tariff for importation of agricultural inputs.
iv. Farmers should farm with season considering the time of heavy rainfall since rainfall has impact on agricultural output.
v. Farmers should be able and also encouraged to apply judiciously their own funds for agricultural development without even the Guarantee Scheme Fund Loan, and once this is achieved, will in turn enhances agricultural productivity in Nigeria.

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SUB-THEME
BUSINESS ECOSYSTEM AND SUSTAINABILITY OF ENDOGENOUS AFRICAN BUSINESSES

IMPACT OF NON-OIL EXPORTS ON ECONOMIC GROWTH AND UNEMPLOYMENT IN NIGERIA

[1]Uwazie, Iyke U., [1]Ogbonnaya, Chukwuemeka M., [2]Anyanwu, Kelechi C. & [1]Nkem Ogechukwu M.
[1]Department of Economics, Michael Okpara University of Agriculture, Umudike &
[2]Alex Ekwueme University, Ndufu Alike Ikwo
Corresponding author: ui.uwazie@yahoo.com

ABSTRACT
This research investigated the impact of specific categories of non-oil exports, namely agricultural exports, commercial service exports, and manufacturing exports, on economic growth and unemployment in Nigeria between 1991 and 2022. The study used various statistical methods to analyze annual time series data, including the Augmented Dickey-Fuller (ADF) unit root test, the Johansen Co-integration Test, and the Seemingly Unrelated Regression method. The findings revealed that manufacturing exports positively influenced the economy, with a 1-unit increase in the manufacturing sector leading to a 2.32-unit rise in economic growth. Conversely, agricultural and commercial service exports hindered economic growth, causing a decline of 1.13 and 2.61 units, respectively, for every 1-unit increase in these sectors. Moreover, a 1-unit increase in manufacturing exports reduced unemployment by 0.11 units, whereas a similar increase in Agricultural Export and Commercial Service Exports raised the unemployment rate by 0.04 and 0.77 units, respectively. Based on these results, the study recommended that the government should actively pursue the implementation of economic programs focused on developing the non-oil sector. Additionally, effective management of exchange rates and inflation policies by monetary authorities is crucial, as a favourable exchange rate would enhance the competitiveness of Nigeria's export products in the international market.
Keywords: Non-Oil Exports, Unemployment, Economic Growth, Seemingly Unrelated Regression

INTRODUCTION

Like many other nations, Nigeria is actively pursuing economic development. According to research by Isaiah, Henneberry, and Radmehr (2020), trade plays a vital role in economic development. Okuduwor *et al.* (2023) have highlighted that non-oil commodity exports are particularly important for sustainable economic growth, providing enhanced foreign exchange earnings, reinforcing the balance of payments, fostering export-oriented industries in manufacturing, boosting firm profitability, generating employment, and increasing government revenue. This cumulative effect accelerates economic growth (Olojede & Michael, 2020).

As indicated by the literature, export serves as a key driver to initiate and sustain economic growth. It is intricately linked to the pulse of the Nigerian economy, playing a fundamental role in ensuring harmonious coexistence (Igwe *et al*., 2015). Export activities are pivotal for any economy's growth and development, bringing in foreign currencies through international trade transactions. Abou-Stait (2005) has emphasized that a robust export sector has the potential to drive economic development by creating job opportunities, thereby reducing unemployment rates and mitigating crime and deviance. Moreover, exports contribute significantly to boosting aggregate economic activities, producing quantities that surpass local demands (Usman & Salami, 2008)

A successful export drive has the potential to transform a struggling economy into a prosperous one. Importantly, the foreign exchange earned from exports bolsters demand within the economy. According to Seyed (2013), the structure of foreign trade plays a pivotal role in accelerating economic growth. Many nations maintain open economies due to the widely acclaimed benefits of foreign trade, as Moshen (2015) highlighted. Exportation not only supplies revenue for the state budget but also facilitates the transfer of technical knowledge. Valuable insights and expertise shared by international buyers enhance operational efficiency and elevate international competitiveness (Olowo et al., 2020). As cross-border trade intensifies, efficiency in utilizing production resources improves, driven by heightened international competition. Export activities promote economies of scale, drive industrialization, and provide access to foreign capital and intermediate goods through imports (Ogba *et al*., 2018). Ultimately, export activities lead to an influx of foreign exchange. Since trade forms the foundation for growth in most countries, every nation can only thrive by engaging in trade.

Export can be divided generally into the oil and non-oil sectors. The operations carried out outside the oil and gas sectors comprise the Nigerian economy's non-oil sector. This covers services in the travel and hospitality industries and banking, insurance, and other financial services (WDI, 2023). The Nigerian Export Promotion Council (NEPC) recognized National Strategic Export Products (NSEPs) as part of its effort to diversify the country's economy through programs including the Nigerian Industrial Revolution Plan (NIRP) and the Nigerian Enterprise Development Programme (NEDEP). Agro-industrial products (including palm oil, cocoa, cashews, sugar, and rice) are among the strategic export goods that are essential to Nigeria's commerce. Cement, iron ore, metals, auto parts/cars, aluminium, and oil and gas industrial products (petroleum products, fertilizer/urea, petrochemicals, and methanol), which are essential to Nigeria's export trade and support the country's economic growth and diversification initiatives.

A detailed examination of Nigeria's export patterns reveals significant shifts. Between 1960 and 1970, non-oil exports, primarily agricultural products, constituted over 80% of the total exports (CBN, 2003). However, after 1970, crude oil exports surged, surpassing 50% of total exports, especially after the 1973-1974 oil crisis. By 1980, oil exports constituted 96.1% of the total, a trend that persisted, never dropping below 70% from 1972 to 2021 (CBN, 2023). In 2022, non-oil exports experienced a notable growth of 39.91%, with semi-processed/manufactured products surpassing agriculture at 6.49%. Urea/fertilizer emerged as the leading single export product, comprising 32.87% of Nigeria's export basket 2022, a surge attributed to the Russia-Ukraine war (NEPC, 2023).

Despite this growth, the current performance of non-oil exports has declined significantly. Over 63 years later, the sector now contributes less than 30% to the GDP. Nigeria's export sector appears heavily skewed in favour of oil. The total value of oil exports escalated from ₦23.1 million in 1961 to ₦13,632.1 million in 1980 (CBN, 1990). However, in the 1980s, oil exports plummeted, reaching a low of ₦11,223.7 million in 1985, a decline attributed to economic depression in highly developed countries and increased energy efficiency reducing the oil demand, as noted by Igwe *et al.* (2015). Subsequently, the quantity and value of oil exports regained dominance and trended upward in the 1990s. The value of oil exports surged from ₦106,623.5 billion in 1990 to ₦21,911.92 trillion in 2022, consistently surpassing non-oil exports in every period (CBN, 2016; NBS, 2023).

Nigeria's developmental progress could have been faster and more impressive, especially compared to the immense financial inflow from oil revenues. The current economic data presents a grim picture of the nation's state. In the mid-1960s, the average oil revenue per capita was US$33, while GDP per capita was estimated at US$245. Surprisingly, despite the rise in average oil revenue per capita to US$325 in the 2000s, GDP per capita has remained stagnant at the 1960s level of US$245. This indicates that the substantial oil wealth accumulated since the 1960s has not translated into significant economic development. Moreover, unemployment becomes a pressing issue in a mono-product oil-dependent economy like Nigeria, where oil production involves sophisticated machinery and minimal direct human labour. As Usman (2010) pointed out, the non-oil export sector faces challenges due to the overshadowing effect of oil exports. The declining quantity, limited range of commodities, and shrinking market share in global non-oil trade have consistently eroded the competitiveness of the non-oil sector in Nigeria over the past three decades.

The dominance of the oil sector has stifled the performance of other sectors in Nigeria, like science and technology, manufacturing, agriculture, and services. This phenomenon is reminiscent of the Dutch Disease, as Onodugo (2013) explained. Dutch Disease refers to the coexistence of abundant mineral resources and bleak economic and political outcomes, leading to macroeconomic issues such as rising unemployment, high poverty rates, reduced manufacturing production, and inadequate infrastructural development despite substantial revenue from oil. Consequently, the delicate structure of the Nigerian economy has resulted in a situation where, despite overall economic growth, the nation has failed to create sufficient jobs and alleviate poverty (Onodugo, 2013).

Experts contend that the Nigerian economy has underperformed because there is no clear link between the oil and non-oil export sectors. The dominance of the oil sector has severely reduced the non-oil sector (Okuduwor *et al.*, 2023). It is difficult to determine the trickle-down effect of the significant riches generated by the oil sector on the general economy because its impact on other economic sectors has yet to be effective. Despite government initiatives to expand Nigeria's non-oil export market, low non-oil export activity and exports, coupled with the country's reliance on oil exports and a negative balance of payments since 1970, have contributed to long-lasting problems like high unemployment and weak economic growth. Given these difficulties, it is imperative to look into how non-oil exports in Nigeria affect

employment and economic growth. In the current literature, there is much discussion about the non-oil export factors contributing to low economic growth and high unemployment rates. This begs the question: Is the non-oil sector itself the problem? It is, therefore, necessary to conduct more research in this area because there is not enough solid data to identify the cause.

THEORETICAL FOUNDATIONS

Staple Theory of Growth

Harold Innis introduced the staple idea in 1963. The theory strongly emphasizes the role traditional goods or staples play in guiding a country with abundant natural resources toward economic progress. According to Udah (2012), one of the main tenets of the staple growth theory is that a country's comparative advantage in producing primary products will lead to specialization, increasing primary-based export commodities. As a result, there is an increase in per capita income, which causes growth to accelerate. This growth affected all areas of the economy by boosting domestic savings and investment, lowering unemployment and underdevelopment, growing the export sector due to the influx of factor inputs, and creating connections with other economic sectors (Watkins, 1963). These procedures boost the home economy's supply responses and the export sector's productivity. According to the idea, significant increases in primary commodity growth result in industrialization and diversification, which improves resource use, increases factor endowment and has implications on forward-backward linkages.

The Staple commerce theory posits that trade can mobilize previously dormant resources, generating surplus returns for productive factors. When a specific commodity becomes a core component of an economy, it reduces imports while increasing investments, consumption, and exports. Consequently, firms gain assured access to vital resources, and efforts are made to subsidize infrastructure to facilitate exports. Social infrastructure and housing near production sites are provided, and various labour market initiatives are implemented to support the resource industry. Export-driven development starts a chain of events that leads to industrialization by producing and exploiting natural resources. These exports generate foreign currency, which is invested in the domestic economy. Natural resources, including salmon, fur, lumber, gold, grain, coal, and oil, were exploited and exported by nations like Canada and the United States, causing them to go through this development cycle. However, this model also points out a potential "trap" in which the economy becomes overly dependent on outside markets, creating distortions and instability due to changes in the prices of staples (Matteo *et al.*, 2008).

Endogenous Growth Theory

Romer (1986), Lucas (1988), Rebelo (1991), Grossman and Helpman (1991), and Barro and Sala-i-Martin (1995) are credited with developing the endogenous growth theory. The idea outlines how investments impact an economy's long-term growth rates. These investments rely on exports through technological advancements, inventions, and active global learning. Therefore, the idea focused on how exports contribute to long-term growth.

Due to the country's theoretically limitless capacity for idea creation, endogenous growth models approach long-term growth as an endogenous variable, allowing output per capita growth to occur without boundaries. Government policy can have an impact on economic growth rates in an endogenous growth framework because actions like providing infrastructure, granting intellectual property rights, enforcing regulations and taxes, and upholding law and order all have the potential to incite and affect the rate of creative activity (Uwakaeme, 2015). Government, therefore, has a lot of potential in these models for both good and bad. Therefore, decisions about how to distribute investments and save money, such as adjusting long-term growth, may be influenced by a country's whole policy organization and its financial structures, regulatory regimes, markets, taxes, and macroeconomic distortions.

According to the guiding principles of endogenous growth theory, economic activities that produce new technological knowledge ultimately drive economic growth. Therefore, internal factors inside the economic system influence the rate of long-term economic growth. These internal dynamics, in particular, determine the possibilities and incentives that foster technological expertise. Over the long term, the economy's growth rate, measured by the percentage increase in output per person, relies on the growth rate of total factor productivity (TFP), which is in turn determined by the pace of technological advancement (Afaha & Oluwatobi, 2012). Endogenous growth theory explores pathways to achieve technological progress, including innovations in new products, production techniques, and markets. Therefore, economic factors can significantly influence the rate of long-term economic growth.

Export Growth Led Hypothesis

The term "export-led growth" describes a situation in which a country's exports fuel its economic growth. According to this idea, an important external factor that boosts export activity drives economic expansion. When export productivity increases, other trends follow, including rapid economic expansion, accelerated export growth, and real exchange rate appreciation. This phenomenon emphasizes the importance of exports to the economy (Yelwa & Diyoke, 2013). This idea is rooted in mercantilism, which believed that trade was the main way to amass money and promote economic expansion. Later, economists like Adam Smith codified this concept.

When exports of a certain product significantly expand, growth is considered to be export-led. The underlying premise of the hypothesis is that increased exports are linked to favourable externalities like technological spillover, specialization, economies of scale, greater market access, and better resource allocation, which improve factor productivity, as previously discussed. In line with the aforementioned, Iyoha (1995) contends that export growth boosts the economy by encouraging investment and technical development or spreading demand to other industries. He goes on to say that the effectiveness of export-led growth is determined by the export commodities' ability to respond to changes in supply and demand. Thus, according to Yelwa and Diyoke (2013), increasing exports leads to specialization, which boosts productivity because new technologies and better management techniques are available. A country's limited resources are redistributed to the economy's most productive sectors due to higher productivity, which leads to GDP growth. In conclusion, the concept that exports drive growth is based on a chain of effects from specialization through higher production to economic expansion. The hypothesis's consequences are that for export development to result in GDP growth, specialization, factor input productivity, and accessibility to new and better technologies must all be facilitated.

Therefore, this study is grounded in the Export-led Growth Hypothesis. This hypothesis revolves around products not based on natural resources. Furthermore, it serves as a framework for fostering sustained growth in non-natural resource sectors of developing countries in the long term. Unlike natural resource exploitation, which is a short-term phenomenon due to its exhaustible nature, the export-led growth hypothesis is focused on long-term development. It has been demonstrated that proceeds from non-renewable natural resource exports can negatively impact long-term economic growth, especially through the mechanism known as "Dutch disease." This concept refers to the situation where increased revenues from natural resource exports lead to the appreciation of the real exchange rate, thereby undermining the competitiveness of the non-resource tradable sector of the economy and increasing demand for imports (Igwe *et al.,* 2015).

Empirical Literature Review

In a study conducted by Akpa *et al.* (2022), the relationship between non-oil export earnings and economic growth in Nigeria was examined. The research employed an ex-post facto design and utilized the Ordinary Least Square (OLS) method on data spanning 31 years from 1990 to 2021. The model considered Gross Domestic Product (GDP) as the dependent variable and non-oil exports (NOEXP) as the independent variable. The findings revealed a positive and significant relationship between NOEXP and GDP in Nigeria.

In another study by Chukwu and Anyanwu (2022), the focus was on non-oil exports and economic growth in Nigeria from 2000 to 2020. This research explored the impact of disaggregated non-oil exports, including vegetable exports (VGT), textiles exports (TEX), animal exports (AN), agricultural raw materials exports (ARM), and solid minerals exports (SLM), on economic growth (GDP). The study employed Vector Autoregressive Estimates (VAR) to achieve its objectives. The results indicated that non-oil exports positively affected the Nigerian economy, although this effect was not statistically significant.

In their study spanning from 1981 to 2016, Ogba *et al.* (2018) investigated the impact of non-oil revenue on economic growth. They employed a regression model with gross domestic product (GDP) as the dependent variable and Agricultural Revenue Contribution, Manufacturing Revenue Contribution, Solid Mineral Revenue Contribution, Services Revenue Contribution, Company Income Tax, and Custom and Excise Duties Tax as explanatory variables. The aim was to understand the relationship between economic growth and non-oil revenue. The findings revealed a long-term relationship between agricultural revenue contribution, manufacturing revenue contribution, solid mineral revenue contribution, services revenue contribution, company income tax, custom and excise duties tax, and economic growth in Nigeria.

Among these variables, Agricultural Revenue Contribution, Manufacturing Revenue Contribution,
Services Revenue Contribution, and Company Income Tax were found to have significantly contributed to the growth of the Nigerian economy during the study period. In contrast, Solid Mineral Revenue

Contribution and Company Income Tax negatively correlated with GDP. Furthermore, Solid Mineral Revenue Contribution and Custom and Excise Duties Tax were deemed statistically insignificant. The results from the Error Correction Model indicated the correct direction, suggesting that the system would return to equilibrium at a speed of approximately 80% if subjected to external shocks in the long run.

In a study conducted by Olawale (2018) spanning from 1980 to 2016, the impact of non-oil exports on economic growth in Nigeria was investigated. The study employed Ordinary Least Square Methods, including Error Correction Mechanism, Over-parameterization, and Parsimonious techniques, to estimate a model with RGDP as the dependent variable and non-oil export, Agricultural product income, and solid mineral income as independent variables. The Augmented Dickey-Fuller (ADF) test was used to examine the time series properties, indicating that most variables were stationary at the first difference (I(1)), while one variable was stationary at level I(2). Consequently, the Auto-regressive Distributive Lag Model (ARDL) was applied. The Johansen Co-integration test confirmed that the variables were cointegrated, and the Fully Modified OLS (FMOLS) technique, suitable for long-run cointegrating regression, was utilized. The findings revealed a positive long-term equilibrium relationship between non-oil exports and economic growth. It emphasized the urgent need for crucial policy formulation and execution to prevent the near extinction of non-oil sector revenue sources.

In another study by Kromtit *et al.* (2017) covering the period from 1985 to 2015, the contribution of non-oil exports to the growth of the Nigerian economy was examined. The study utilized the Augmented Dickey-Fuller test to assess unit roots and the stationarity of variables. Non-oil exports were found to be stationary at the level, while economic growth (proxied by Gross Domestic Product) and exchange rates were stationary at the first difference. The Auto-regressive Distributed Lag (ARDL) model established the relationship between non-oil exports and GDP. The Bound test confirmed co-integration among the variables, indicating a long-run relationship. The ARDL regression results demonstrated a positive and significant relationship between non-oil exports and GDP, signifying a substantial contribution of non-oil exports to economic growth in Nigeria. Additionally, the study revealed a negative, albeit not significant, relationship between exchange rates and GDP, aligning with economic theory.

In a study conducted by Aljebrin (2017) spanning from 1988 to 2014 in Saudi Arabia, the impact of non-oil exports on non-oil economic growth was empirically estimated. Ordinary Least Squares and Error Correction Model approaches were employed. The results indicated a positive and significant relationship between non-oil economic growth and non-oil exports in the short and long run. Additionally, a positive and significant relationship existed between non-oil economic growth and capital in both time frames. In the long run, there was a positive and significant relationship between non-oil economic growth and labour, whereas, in the short run, the relationship was positive but not statistically significant. The error correction term was correctly negatively signed and highly significant (-0.537), suggesting a rapid adjustment process. If non-oil GDP is 1% out of equilibrium, a 53.7% adjustment towards equilibrium will occur within the first year.

In a study by Anthony-Orji *et al.* (2017) covering the period from 1980 to 2013 in Nigeria, the impact of non-oil exports on capital formation and economic growth was investigated. They used a classical linear macroeconomic model with aggregate time series data (including non-oil export, openness to trade, and money supply). The empirical results revealed a positive impact of non-oil exports on Nigeria's capital formation and economic growth. However, the level of statistical significance varied between capital formation and economic growth.

Fiiwe and Morrison (2017) analyzed crude and non-oil exports to Nigeria's economic growth from 1980 to 2015. They employed various analytical methods such as OLS, Augmented Dickey-Fuller, co-integration, and error correction models. The findings indicated that both the oil export sector and non-oil export sector positively influenced GDP. The analysis showed that all variables were stationary at the first order of difference, and two cointegrating variables were identified. The error correction model revealed a long-run relationship between oil and non-oil export sectors and Nigeria's GDP. The study concluded that non-oil exports had a greater impact on the economy than the oil export sector during the specified period.

Furthermore, Seyed and Tang (2015) analyzed the impact of variations in export values of oil and non-oil products on economic growth in Iran. They employed multivariate co-integration and Granger causality methods on annual time series data over 38 years. The results supported the unidirectional causality from oil and non-oil exports to economic growth, indicating a long-run association. This confirmed the effectiveness of the export-led growth hypothesis in Iran's economy. The estimated model included GDP as a function of non-oil export, oil export, total imports, capital investment, and labour force.

Mohsen's (2014) study explored the causal relationship between non-oil international trade (measured in terms of non-oil exports and imports to GDP) and GDP. A tri-variate model with oil revenues and GDP as explanatory variables and non-oil international trade as the explained variable was estimated across eleven selected oil-exporting countries. Panel tests were conducted, including unit root, causality, and co-integration analyses. The results showed a significant causality, indicating a shift from oil revenues and economic growth to trade in most oil-exporting countries under study. However, non-oil international trade did not significantly affect GDP in the long and short run. This suggests that oil resources and GDP drive non-oil trade in the selected countries.

In Seyed's (2014) investigation of the link between exports and economic growth in Iran from 1976 to 2010, ordinary least squares (OLS), stationarity tests, and the Johansen co-integration technique were employed. The study used 34 years of annual time series data, with GDP as the dependent variable and exports, inflation, and real exchange rate as explanatory variables. The results showed a positive and significant relationship between GDP and exports and between GDP and the regressors (inflation and real exchange rate). However, using OLS was deemed inappropriate due to the presence of unit roots at levels, leading to the loss of consistency, efficiency, and unbiasedness properties. Consequently, the outcomes of the analysis might be spurious and misleading.

In a study by Christopher et al. (2014), the impact of non-oil exports on Nigeria's economic development was investigated. The researchers used per capita income as a proxy for economic development. They modelled it as a function of non-oil export volume, trade openness, exchange rate, inflation rate, and capital formation. Ordinary least square estimation revealed a significant positive relationship between non-oil exports and income per capita. Increasing non-oil export volume could significantly advance Nigeria's economic development. Although individual variables had insignificant impacts, their collective effect was notable. However, the study also indicated that Nigeria might need to benefit more from external trade, given the negative coefficient of trade openness.

Another study by Alodadi and Benhin (2014) explored the determinants of economic growth in the non-oil export sector of the Saudi economy. The research examined the effects of non-oil exports, private investment, public investment, and tourism (along with labour and capital) on economic growth, with GDP as the dependent variable. Utilizing a Restricted Vector Error Correction Model and Johansen's co-integration approach, the study found that non-oil exports, although significant, had a negative impact on economic growth. Conversely, private and public investments and international tourist arrivals positively influenced economic growth in the Saudi economy

The common understanding in the literature is that, in addition to its effect on economies of scale, exports may increase total factor productivity through externalities such as the transfer of technology, improvements in worker and managerial skills, and increased production capacity. This information was presented in numerous studies that offered a helpful and significant framework for examining the relationship between exports and economic growth. Chukwu and Anyanwu (2022) and Alodadi and Benhim (2014) are two such studies.

Some exposures became part of the investigations due to the results of the examined empirical literature. Studies that used OLS and those that used VAR as estimation tools both had considerably different results. Among the studies examined, Chukwu and Anyanwu's (2022) breakdown of non-oil export into its many components was optimal for capturing the variations in how these non-oil export components affected growth. However, productivity has been touted as a solution to the enduring challenge of unemployment. Export equals productivity, in other words. Therefore, it is clear that few publications analyze the effect of non-oil exports on Nigeria's unemployment rate; using a regression model that appears to be unconnected will set this study apart from others.

METHODOLOGY

Ex-post facto research design is the one used in this study. This is the type of research design in which a researcher cannot manipulate data but rather uses it as it is. These studies' data covered 32 years, from 1991 to 2022, and were sourced from the World Development Indicators, the National Bureau of Statistics, and the CBN statistics bulletin.

Model Specification

The model of estimation of the contributions of non-oil export to economic growth and employment in Nigeria is strictly fastened to the endogenous growth theory. The general cob-Douglas production function is depicted as follows:

$Y_t = A_t(K_t L_t)$ Equation 1

Y (output) is a positive function of K (capital), L (labour) and A (total factor productivity). The factor productivity captures growth in output in the model not accounted for by an increase in physical input (K). Since total factor productivity can be determined endogenously, it is one of the routes through which non-oil export affects economic growth. For simplicity, the same level of capital and labour is employed in the economy. Therefore, economic growth is assumed to be a function of total factor productivity. Thus,

$Y_t = f(A_t)$ Equation 2

Large numbers of potential factors that can affect total factor productivity abound. However, this study identifies the following factors as very instrumental to efficiency and productivity:

$A = (AE, CE, ME)$ Equation 3

The theoretical model defining the effect of total factor productivity on economic growth is:

$RGDP = AE, CE, ME$ Equation 4

Econometrically, the relationship can be expressed as:

$GDPG_t = \delta_0 + \alpha_1 AE_t + \varphi_2 CE_t + \theta_3 ME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t$ Equation 5

Therefore, equation 5 forms the theoretically specified model for the study. Taking the Log form of the model, the specified relation is estimated thus:

$GDPG_t = \delta_0 + \alpha_1 LAE_t + \varphi_2 LCE_t + \theta_3 LME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t$ Equation 6

Where GDPG is a proxy for economic growth interpreted as "GDP growth", LME represents the Log of export of manufactures, LAE is the Log of Agricultural export, LCE stands for the Log of export of commercial services, INF is the inflation rate, REXCH is the real exchange rate, δ_0 is the constant term, $\alpha_1, \varphi_2, \theta_3$ are coefficients of the explanatory variables. In contrast, u_t stands for the error term.

Equation 6 is modified to capture the interest of the impact of non-oil export on employment in Nigeria. Thus, the relation is specified as follows:

$UNEMP_t = \delta_0 + \alpha_1 LAE_t + \varphi_2 LCE_t + \theta_3 LME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t$ Equation 7

Where UNEMP represent the unemployment rate in Nigeria.

Method of Data Analysis

The specified economic models in this study will be estimated based on the following steps:

Descriptive Statistics

Furthermore, the study conducted descriptive pre-estimation tests to assess the effect of non-oil exports on economic growth and unemployment in Nigeria. The researcher gives a better knowledge of the data used in each model and an overall picture of each variable employed by outlining the fundamental variables used in each study (Gujarati & Porter, 2009).

Unit Root

This was done to check whether the time series used in this investigation were stationary. The enhanced Dickey-Fuller (ADF) test was utilized in the investigation.

Co-integration Test

This test aimed to determine the long-term characteristics of the variables under investigation. At this point, the Johansen Co-integration test was conducted to determine the long-term characteristics of the estimation model's variables.

Seemingly Unrelated Regression Model

We adopted a seemingly unrelated regression equations (SURE) model. SURE is proposed by Zellner. In this study, each equation models a different dependent variable, but the regressors are the same. The two equations are

$GDPG_t = \delta_0 + \alpha_1 LAE_t + \varphi_2 LCE_t + \theta_3 LME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t$ Equation 6

$UNEMP_t = \delta_0 + \alpha_1 LAE_t + \varphi_2 LCE_t + \theta_3 LME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t$ Equation 7

According to Zellner (1962), where contemporaneous correlation is present, jointly estimated equation models, such as the SURE method, are more effective than independent equation solution methods because simultaneous bias will be present in the independent equation solution methods, such as multiple regression models. The SURE approach calculates the system parameters while considering

contemporaneous correlation in the errors across equations and heteroskedasticity. The complete model that estimates the relationship between non-oil export and economic growth on the one hand and non-oil export and employment rate in Nigeria on the other hand consists of two single equations as follows:

$$\begin{bmatrix} GDPG_t = \delta_0 + \quad \alpha_1 LAE_t + \varphi_2 LCE_t + \theta_3 LME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t \\ UNEMP_t = \delta_0 + \quad \alpha_1 LAE_t + \varphi_2 LCE_t + \theta_3 LME_t + \beta_4 INF_t + \lambda_5 REXCH_t + \mu_t \end{bmatrix}$$

The SUR system consists of several individual relationships linked by the reason their disturbances are correlated (Zellner, 1962).

Estimation Techniques

The investigation employed a combination of descriptive and inferential statistical methods. Descriptive statistics utilized tables, graphs, and charts to present the data visually. Inferential statistics, on the other hand, employed relevant econometric techniques such as the Augmented Dickey Fuller Unit Root test, Johansen Co-integration, and other methods for in-depth analysis. Seemingly, the Unrelated Regression Method is used as well as post-diagnostic tests.

RESULTS AND DISCCUSSIONS

Descriptive Statistics

Table 1: Descriptive Statistics of Time-Series Variables Employed

	GDPG	INF	LAE	LCE	LME	REXCH	UNEMP
Mean	4.079573	18.40588	19.75630	21.13339	20.24693	109.7810	4.124774
Median	4.230061	12.87658	19.73709	21.32924	20.48247	100.5040	3.898000
Maximum	15.32916	72.83550	23.53086	22.23816	22.61818	273.0094	5.999000
Minimum	-2.035119	5.388008	15.20180	19.05759	17.84086	49.77631	3.700000
Std. Dev.	3.842207	16.51685	2.088680	0.922152	1.659218	49.74334	0.611441
Skewness	0.458013	2.127796	-0.233231	-1.008740	-0.128620	1.819339	2.075499
Kurtosis	3.666225	6.423366	2.358777	3.027262	1.559483	6.194417	6.244019
Jarque-Bera	1.657153	38.52976	0.812139	5.258332	2.765795	30.28219	35.84950
Probability	0.436670	0.000000	0.666264	0.072139	0.250851	0.000000	0.000000

Source: Researcher's Compilation from E-view 7

The skewness test statistic reveals that the Logs of Agricultural Export (LAE), Manufacture Export (LME), and GDP growth (GDPG) exhibit skewness values falling within the range of -0.5 to +0.5, indicating approximate symmetry. In contrast, INF, REXCH, and UNEMP are positively skewed, with skewness values of 2.12, 1.81, and 2.07, respectively, indicating a right-skewed distribution. The only exception is commercial service export, which shows a left-skewed distribution with a skewness value of -1.00.

Considering the kurtosis test statistic, only commercial service exports display a mesokurtic shape with a value close to 3. However, GDPG, INF, REXCH, and UNEMP exhibit kurtosis values of 3.66, 6.42, 6.19, and 6.24, respectively, indicating a leptokurtic shape as their kurtosis values surpass 3. Additionally, LAE and LME have kurtosis values of 2.35 and 1.55, respectively, classifying them as platykurtic in shape.

The Jarque-Bera test statistic determines whether a given distribution is asymptotic, uni-modal, and symmetrical around the mean. Examining the results in Table 1, it is evident that GDPG, LAE, LCE, and LME rejected the null hypothesis of normal distribution, indicating a bell-shaped distribution as their probability values exceeded 0.05. In contrast, INF, UNEMP, and REXCH accepted the null hypothesis, signifying a non-normal distribution. Furthermore, the standard deviation analysis revealed that the real exchange rate (REXCH) is the most volatile variable, with a value of 49.74, whereas unemployment (UNEMP) is the least volatile, having a standard deviation of 0.61.

Unit Root Test

The ADF test was employed to validate the presence of a unit root, and the results are summarized in Table 2 below. According to the ADF test statistics, estimated with trend and intercept at conventional levels of significance, the variables exhibited indications of first-order integration.

Table 2: Augmented Dickey Fuller Tests.

Variable	ADF TEST (At levels)			ADF Test (1st difference)			
	t Statistic	**TCV 5%**	**Remark**	**t Statistic**	**TCV 5%**	**Prob. Value**	**Remark**
LAE	-1.548487	-3.574244	NS	-8.614190	-3.574244	0.0000	I(1)
LCE	-2.249190	-3.568379	NS	-4.692531	-3.574244	0.0041	I(1)
LME	-2.987540	-3.568379	NS	-6.071110	-3.574244	0.0001	I(1)
UNEMP	2.502240	-3.574244	NS	-4.920984	-3.574244	0.0024	I(1)
INF	-2.592948	-3.568379	NS	-5.103937	-3.603202	0.0020	I(1)
REXCH	-2.572060	-3.568379	NS	-5.096383	-3.574244	0.0015	I(1)
GDPG	-2.809890	-3.568379	NS	-7.434742	-3.574244	0.0000	I(1)

TCV means test critical value
Source: Researcher's compilation, 2023 from Eviews10

The order of integration of the variables based on the ADF unit root test indicates the need for a co-integration test using the Johansen co-integration technique.

Johansen Co-integration Test

The Johansen co-integration test was conducted to determine whether the calculated model parameters demonstrate a long-term mutual relationship. The test was conducted in two stages: the Trace and the Maximum Eigenvalue tests.

Table 3: Johansen Multivariate Co-integration Test Results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.892600	184.2776	125.6154	0.0000	64.70466	46.23142	0.0002
At most 1 *	0.849462	119.5729	95.75366	0.0005	54.91266	40.07757	0.0006
At most 2	0.644124	64.66027	69.81889	0.1204	29.96201	33.87687	0.1368
At most 3	0.513319	34.69826	47.85613	0.4640	20.88423	27.58434	0.2833
At most 4	0.229125	13.81402	29.79707	0.8509	7.546637	21.13162	0.9292
At most 5	0.193780	6.267386	15.49471	0.6639	6.246567	14.26460	0.5818
At most 6	0.000718	0.020819	3.841466	0.8852	0.020819	3.841466	0.8852

Trace test indicates 2 co-integrating eqn(s) at the 0.05 level
Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Source: Researcher's compilation, 2023 from Eviews10

The results from the Johansen multivariate co-integration test presented in Table 3 indicate the presence of two co-integration equations among the variables. Both the trace statistic and maximum eigenvalue statistic surpassed the critical values at the 5% significance level, affirming the existence of co-integration among the variables. This suggests that the variables share a common long-term path. With this confirmation of co-integration, a long-run relationship is established among GDP growth, Agricultural export, Commercial service export, manufacturing export, inflation, real exchange rate, and unemployment. This long-run relationship implies that all the explanatory variables are interlinked, and their fluctuations will lead to more than proportionate changes in GDP growth and unemployment levels.

Seemingly Unrelated Regression

The table below shows the excerpts from the seemingly unrelated regression estimation.

Result of Seemingly Unrelated Regression Estimation for Unemployment and Economic Growth

Coefficient	Economic Growth (GDPG) Estimate	Prob	Unemployment (UNEMP) Estimate	Prob
Intercept	41.11215	0.0616[b]	-12.13537	0.0005[a]
C(2)*LAE	-1.133560	0.0123[a]	0.042033	0.5298
C(3)*LCE	-2.610895	0.0297[a]	0.777482	0.0001[a]
C(4)*LME	2.327682	0.0032[a]	-0.115113	0.3185
C(5)*INF	-0.074444	0.0895[b]	0.014762	0.0284[a]
C(6)*REXCH	-0.047538	0.0085[a]	0.009636	0.0006[a]

[a] significance at $\alpha = 0.05$ [b] significance at $\alpha = 0.10$

Source: Researcher's compilation, 2023 from Eviews10

The regression estimates in Table 4 illustrate the impact of non-oil exports on economic growth and unemployment in Nigeria. The results reveal significant effects of non-oil exports on economic growth in the country. Specifically, the analysis demonstrates a significant but negative relationship between Agricultural Exports, Commercial Service Exports, and economic growth. A one-unit increase in agricultural and commercial service exports is associated with a decrease in economic growth by 1.13 and 2.61 units, respectively. Inflation and real exchange rates also negatively influence economic growth in Nigeria during the investigated period. A one-unit increase in inflation and real exchange rate results in a decline of economic growth by 0.07 and 0.04 units, respectively. Interestingly, only manufacturing Exports significantly and positively influence economic growth in Nigeria, with a one-unit increase leading to a 2.32-unit rise in economic growth.

The relationship between non-oil exports and the unemployment rate in Nigeria reveals that Agricultural exports and manufacturing exports have had an insignificant impact on the unemployment rate, indicating that positive changes in these sectors have not significantly influenced the level of unemployment in Nigeria over the years. On the other hand, it was observed that inflation (INF) and real exchange rate (REXCH) have significantly positive impacts on Nigeria's unemployment rate. Specifically, a one-unit increase in the real exchange and inflation rates is expected to increase the unemployment rate by 0.009 and 0.014 units, respectively. Interestingly, only Commercial Service Exports exhibited a significant and positive impact on unemployment in Nigeria. The analysis indicates that at a 5% significance level, a one-unit increase in the unemployment rate results in a 0.77-unit increase in Commercial Service exports.

Post Estimation Tests

Residual Diagnostic Test: Normality Test

The normality test compares the third and fourth moments of the residuals to those from the normal distribution, reporting the multivariate extensions of the Jarque-Bera residual normality test

Table 5: System Residual Normality Tests

Orthogonalization: Cholesky (Lutkepohl)
Null hypothesis: Residuals are multivariate normal

Component	Skewness	Chi-sq	df	Prob.
1	0.565236	1.650705	1	0.1989
2	1.388505	9.961054	1	0.0016
Joint		11.61176	2	0.0030
Component	**Kurtosis**	**Chi-sq**	**df**	**Prob.**
1	4.049493	1.422689	1	0.2330
2	5.331400	7.020757	1	0.0081
Joint		8.443446	2	0.0147
Component	**Jarque-Bera**	**df**	**Prob.**	
1	3.073393	2	0.2151	
2	16.98181	2	0.0002	
Joint	20.05520	4	0.0005	

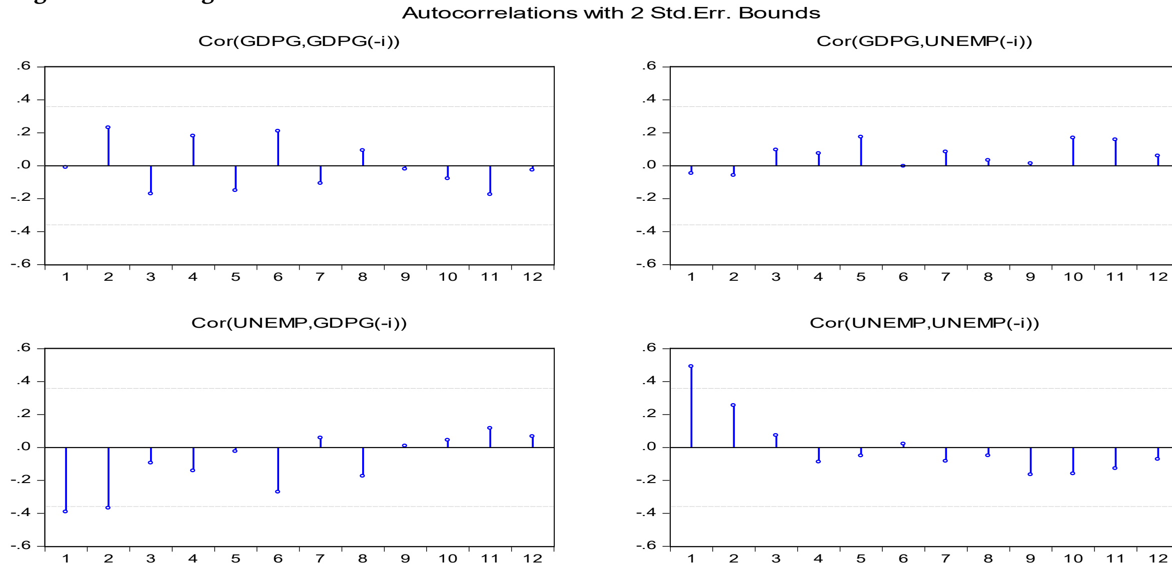
Source: Researcher's compilation, 2023 from Eviews10

As a result, it can be shown from the result estimates in Table 5 above that the residuals in equation 1 (i.e., component 1) of the estimated model tend to have a normal distribution. Together nevertheless, the model deviates from the normal distribution.

Correlograms

A graphical depiction known as a correlogram is used to identify autocorrelation in the calculated relationships' residuals. The graphs are, therefore, inside the range of no autocorrelation.

Figure 1: Correlograms



Portmanteau Autocorrelation Test

Table 6 below shows the results of the Portmanteau test; it shows autocorrelation for lags 1 and 2 but no autocorrelation for lags 3 to 12 among the residuals because all probability values are over 0.05.

Table 6: System Residual Portmanteau Tests for Autocorrelations

Lags	Q-Stat	Prob.	Adj Q-Stat	Prob.	df
1	11.31247	0.0233	11.68955	0.0198	4
2	16.30016	0.0383	17.02122	0.0299	8
3	18.95938	0.0895	19.96535	0.0677	12
4	21.80862	0.1495	23.23671	0.1076	16
5	23.45538	0.2670	25.20015	0.1939	20
6	26.82142	0.3128	29.37404	0.2064	24
7	27.30750	0.5016	30.00190	0.3631	28
8	29.30699	0.6035	32.69686	0.4326	32
9	31.08994	0.7011	35.20920	0.5060	36
10	32.27377	0.8026	36.95676	0.6080	40
11	33.43841	0.8767	38.76195	0.6951	44
12	33.67325	0.9418	39.14511	0.8151	48

Null hypothesis: no residual autocorrelations up to lag h

*The test is valid only for lags larger than the System lag order.

df is the degrees of freedom for the (approximate) chi-square distribution

Source: Researcher's compilation, 2023 from Eviews10

CONCLUSION AND RECOMMENDATIONS

This study delved into the impact of non-oil exports on economic growth and unemployment in Nigeria, specifically examining the effects of disaggregated non-oil exports such as agricultural exports, commercial service exports, and manufacturing exports. As such, the study employed various methods, including the ADF unit root test, Johansen Co-integration test, Seemingly Unrelated Regression method, and additional residual diagnostic tests. The results revealed a long-term relationship among the disaggregated non-oil export variables, economic growth, and unemployment during the study period. Notably, agricultural exports, commercial service exports, inflation, and real exchange rates negatively affected economic growth in Nigeria. Conversely, manufacturing exports exhibited a significant positive influence on economic growth in the country. Similarly, the study revealed a negative correlation between manufacturing exports and unemployment in Nigeria. In other words, expanding the manufacturing export sector corresponds to reduced unemployment. Conversely, agricultural exports, commercial service exports, inflation, and real exchange rates contributed to higher unemployment rates. The findings highlight the interconnectedness between economic growth and unemployment in Nigeria. Factors that hinder economic growth exacerbate the unemployment situation in the country. The study underscores the importance of effectively implementing national policies, especially in the agricultural sector, to stimulate economic growth and expand Nigeria's export portfolio. A meticulous execution of these policies can enhance foreign exchange earnings, thereby stabilizing the exchange rate and fostering economic growth while reducing unemployment in Nigeria.

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CORPORATE GOVERNANCE AND ACCOUNTABILITY ON THE SUSTAINABILITY OF THE NIGERIAN ECONOMY

[1]Nwokoro, N. A., [2]Chukwu, Bonaventure and [1]Anuforo, R. U.
[1]Department of Business Administration, K. O. Mbadiwe University Ogboko, Ideato South, Imo State
[2]Department of Business Administration, Michael Okpara University of Agriculture, Umudike, Abia State
Corresponding author: bobanuforo@gmail.com

ABSTRACT
Organizations are revising their corporate governance practices while establishing corporate governance, which has become a priority for emergent economies like Nigeria and China. This paper aims to determine the director's independence, transparency, delivery, and efficiency in the sustainability of the Nigerian economy. It also assesses the impact of accountability and regular compensation review on the effectiveness of selected government establishments in Southeast East Nigeria. A population of three thousand three hundred and twenty-seven (3327) comprising the aggregation of senior, junior, and low-level management of selected firms of Federal Parastatals in the South East was used. The trend indicates a significant effect of directors' independence, transparency, diversity, and efficiency in the sustainability of the Nigerian economy. The study indicates a significant effect of directors' independence, transparency, diversity, and efficiency on the sustainability of the Nigerian economy. The study recommends that there is a need for government parastatals to adopt corporate governance mechanisms in order to make the board of directors more independent and avoid the unnecessary intervention of managing directors in important committees' commitment. The study also recommends that there is a need for the public account committee to maintain a stronger auditor's independence and transparency operation with no political influence to sustain an efficient and effective collection and accounting of public funds as well as adequacy in safeguarding assets and misappropriation for the sustainability of the Nigerian economy.
Keywords: Parastatals, independent directors, transparency, accountability.

INTRODUCTION
Organizations are revising their corporate governance practices while establishments and corporate governance have become priorities for emergent economies like Nigeria, China, and Indonesia. An adequate corporate governance system has two requirements: micro and macro thrust. At the micro level, it must ensure that the firm is a productive organization pursuing its objectives. At the macro level, corporate governance, in the words of Federal Reserve Chairman Alan Greenspan, has evolved to more effectively promote the allocation of the nation's savings to its most productive use. The collapse of high-profile firms like Enron, Tyco, and Xeron and the belief that poor corporate governance contributed to their collapse have generated renewed interest in determining the best corporate governance practice. (Sarbane-Oxley, 2012).

Furthermore, the need for robust corporate governance in developing countries like Nigeria is evident. Several recent studies have suggested that a strong corporate governance system is necessary to encourage inward investment and nourish long-term economic growth (Johnson, 2010).

The emergence of a growing economy and organizations struggling to fit into the emergence of technology and innovation in the system has brought difficulty in identifying the practical and institutionalization of corporate governance. There is also the pressing problem of aligning their thrust and structure of corporate governance and accountability towards attaining a sustainable goal in our economy in Nigeria; observance of the principle of corporate governance has been secured through the combination of voluntary and mandatory mechanisms. Security and Exchange Commission (SEC) in September 2008 inaugurated a national Committee on corporate governance chaired by Mr. M. B. Mahmoud for the review of the 2008 code of corporate governance for public terms in Nigeria to address the weaknesses and to improve the mechanism for its enforceability and sustainability.

The finding of the 2008 Mahmoud-led committee discovered challenges such as weak law enforcement, abuse of shareholders rights, lack of responsibilities of the board of directors, weakness of the regulatory bodies, lack of enforcement and monitoring mechanisms, including policy inconsistency and lack of transparency and lack of transparency (Okpara, 2011). This problem is evidenced worldwide, but the Nigerian experience was aptly summarized as the worst ever. These inherent problems necessitated this

study to investigate corporate governance and accountability on the sustainability of the Nigerian economy.

LITERATURE REVIEW

There is no universally held definition of corporate governance and certainly not one authorship of corporate governance (Mayor, 2011). Corporate governance is a procedure, customs, laws, policies, and institutions that affect how a corporation is directed, administered, and controlled. It examines the relationship between shareholders and the management of firms. The stakeholders are defined as the employer's customers and creditors. The primary objective of corporate governance is to ensure accountability and transparency of those involved in the organization's policy.

Using the Agency theory approach, Shleifer and Vishny (2011) defined corporate governance as a process in which a supplier of finance to firms assures themselves of getting a return on their investment. In addition, Cadbury (2012) defines corporate governance as the system by which companies are directed and controlled by shareholders. Tsamenyi and Uddin (2015) posit that corporate governance adoption is becoming a central issue in less developed and emerging economies like Nigeria. Ndiweni (2018) examined corporate governance in South Africa in a social and cultural context; the author found the same evidence in Ghana in South Africa. In addition, Edward (2008) built up his paper on several previous studies of corporate governance in Nigeria (Oyejide & Soyibo, 2011) (Yakassi, 2011); Ahummari (2012); and Okike (2017). These authors examined the effects of ethnicity, gender, power, and power relationships on corporate governance practices in Nigeria. They discovered that corporate governance practices in Nigeria are based on developed world practices.However, there are inadequacies in the Nigerian regulatory system and a lack of mechanisms for implementing and enforcing corporate governance practices.

Empirical Review

Akisi (2018) examines the relationship between foreign direct investment (FDI) inflow and its determinants in 27 emerging markets between 1997 and 2005. The author focuses on the role of accounting standards and corporate governance. The author discovered that high-quality accounting standards and effective corporate governance will increase Foreign Direct Investment (FDI). As a result, the author concludes that emerging markets can attract foreign investment opportunities by improving their financial reporting and corporate governance quality.

D'souza Sirikin and Simpson (2013) researched to determine the relationship between board diversity and a firm's value using a sample of 638 from 1000 firms. The result of this study suggests that a higher percentage of women and minorities on the board of directors can increase firm value, as proxied by Porchia-Uddin (2018). They discovered a positive relationship between board diversity measured by the presence of women and minorities, suggesting that the properties of women on boards are a significant determinant of the fraction of minority directors on the board in another development.

Kieschnik and Moussawi (2018) studied the United States of America (USA) from 1996 – 2016 on Chief Executive Officers' duality, board independence, and board size. The study discovered a negative association between governance attributes and financial leverage. Dethamrong *et al.* (2017) in Thailand with 793 firms from 2001 = 2014 on CEOs duality, Board independence, and board diversity. Audit reputation, ownership concentration, and board size.

The study revealed no association between the level of debt and corporate governance in Nigeria. Ahunwan's (2012) empirical study provided an account of the corporate governance system in Nigeria and examined the prospect of recent reform and how it will contribute to more governance.

The author found that the Nigerian judiciary system is weak, and the economy is made of underdeveloped market institutions caused by deeply noted corruption and disrespect for the rule of law.

METHODOLOGY

The researcher adopted a survey research design with primary and secondary data collection with a population of three thousand three hundred twenty-seven (3327) comprising the aggregation of the Senior, Junior, and management of selected firms of federal parastatals. In the South East, Nigeria. The researcher derived its sample size with the 1964 Taro Yamane formula:

$$n = \frac{N}{1 + Ne^2}$$

Where: n = Sample size
N = Total population (3.327)
I = Constant
e = Margin of tolerance error
@ 5% (0.05)

$$= \frac{3327}{1 + 3327 (0.05) (0.05)}$$

$$= \frac{3327}{9.3} = 357.7 \text{ or } 358$$

The regression analysis results determine the effects of the board of directors' independence on the performance of selected federal government parastatals in South East Nigeria.

Model **a = dependent** **b = independent variable**	**Unstandardized coefficient**		**Standard coefficient**				
	B	**Std error**	**Beta**	**T**	**Sig**	**Lower bound**	**Upper bound**
1 = constant Directors = Independent	.020		9.73	.329	.743	.138	.099
Performance = Dependent	1.009			76.001	.000	.982	1.035

@ 95.0% confidence interval
R = 0.973, R-square = 0.946; Adjusted R squared = 0.746; Std error of the estimate = 0.21898; Durbin Watson = 0.254; f. statistics = 5776.172; T. statistics (df) = 1 & df_2 – 132 = 9.322;
a = dependent variable: performance
b = Predictor variable independent of directors
Source: Researchers use of 2023 SPSS version 23.0
Significance 95% confidence level
Critical value = 1.984

The F-statistics of 5776.172 measures the model's goodness of fit, which is greater than the 2.5 rule of thumb. The calculated t-statistics remains @ 9.322 (df = 1 & df_2 = 132)
Ho = B1 = 0
Test the hypothesis that all slope coefficients are equal to zero
Hi ≠ B1 ≠ 0 Test the hypothesis that not all slope coefficients equal zero.
Since the calculated t-statistics of 9.322 is greater than the critical value of 1.984. Then, the null hypothesis was rejected, and the alternative was accepted. This means that there is a significant effect of the director's independence on performance accountability on the sustainability of the Nigerian economy.

CONCLUSION AND RECOMMENDATIONS

This study investigated the impact of corporate governance and accountability on the sustainability of the Nigerian economy. The frequency distribution and percentages was determined. The hypothesis were tested using regression analysis and Pearson Product Moment Correlations with the aid of SPSS version 23.0. And therefore recommends the need for government parastatals to adopt corporate governance and avoid the unnecessary interventions of the managing directors of firms. Improvement should be made on corporate governance for proper accountability of the stakeholders. There is need for internal and external audit committee for independence and transparent operation of firms. The Nigerian Judiciary should sit up so that accounting officers in government parastatals will carry out government business in accordance with the rule of law, accountability, efficiency and responsiveness to duty. Finally, government should craft strategies to manage socio-cultural diversity of employees to handle corruption practices affecting corporate governance in Nigeria.

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ANALYSING GOVERNANCE INDICATORS FOR ACHIEVING SUSTAINBLE SOCIO-ECONOMIC DEVELOPMENT IN DEVELOPING COUNTRIES

[1]Ezechi, Chukwu P., [2]Ihemeje, J. C., [2]Emeka, Adaugo, [2]Adoyi, K. A., [2]Konze, J. N. and [2]Mpamah, C. C.

[1]Gregory University, Uturu,

[2]Michael Okpara University of Agriculture, Umudike

ABSTRACT:

The understanding of the link between governance and socioeconomic conditions in developing countries like Nigeria remains crucial in the literature because effective development may not depend on the type of government but on the quality of governance or the character of the state. This paper discusses the importance of governance institutions as a fundamental determinant of robust and sustainable social and economic development in Nigeria. The study adopted a survey research design using a five-point Likert scale to elicit the opinions of the respondents. The multiple regression analysis was employed to explore the relationship between socioeconomic development as the dependent variable and governance indices as independent variables. It was observed that good governance indices are positively and significantly related to sustainable socio-economic development. The study recommended that the various tiers of government should be proactive in promoting good governance. Good governance is the right of the citizenry and a commitment for all in the pursuit of sustainable socioeconomic goals for every nation, including Africans.

Keywords: Democratic and political governance, Economic and management governance, corporate governance, sustainable socioeconomic development.

INTRODUCTION

The understanding of the link between governance and socioeconomic conditions in developing countries like Nigeria remains crucial in the literature because effective development may not depend on the type of government but on the quality of governance or the character of the state. The extent to which the interconnection between governance and socioeconomic conditions is perceived would depend on how socioeconomic crisis is understood. Broadly, socioeconomic crisis means the factors or conditions that have an adverse influence on individuals' social and economic activities, including health issues, lack of education, disaster, racial and religious discrimination, poverty, overpopulation, unemployment, political unrest, and corruption. In this case, growing poverty and a dysfunctional economy with massive unemployment, exacerbated by a lack of even the most basic human rights and fundamental freedoms, could place the concerned economy at a low level of human development in the long run. Various factors are said to be responsible for Nigeria's current status as an underdeveloped country. These range from historical colonial experience, political instability, the monoculture nature of the national economy, and the persistent lack of commitment to focused development strategies on the part of the political elites. The most popular among the prescriptions for tackling the phenomenon of underdevelopment emphasized macroeconomic policies, economic diversification, transparency and accountability in governance and even direct distribution of resource proceeds to the general population. These solutions have not been able to address Nigeria's development challenges adequately. However, the crucial role of the regulatory institutions, mainly their oversight functions, has arguably been the missing link in establishing the complementary relationship between governance and development in Nigeria. This paper discusses the importance of governance institutions as a fundamental determinant of robust and sustainable social and economic development in Nigeria.

LITERATURE REVIEW

The attainment of any nation's socioeconomic development goal depends on the practice level of governance. The governance indices are democracy and political governance, corporate governance, and economic and management governance.

Democracy and good political governance constitute an essential prerequisite for successful economic, corporate and socio-economic governance. It touches on the fundamental rights of the citizenry (both individuals and groups), the accountability of government to the governed, and the relative stability of the polity (Klaus, 2014). It addresses Promoting democracy and good political governance as a basis for the reduction of poverty and the attainment of sustainable development. This demands strengthening the

political and administrative structures of African countries in line with the principles of democracy, transparency, accountability, integrity, respect for human rights and promotion of the rule of law. The objectives are - constitutional democracy and the Rule of Law, the Separation of powers, the Prevention and reduction of intra and inter-state conflicts, and the Promotion and protection of civil and political rights. Ensuring accountable, efficient and effective public service delivery at the national and decentralized levels; promotion and protection of the rights of women; promotion and protection of the rights of children and young persons; Promotion and protection of the rights of vulnerable groups (Ajiye, 2014).

Constitutional democracy refers to constitutionally established provisions and institutions that enable citizens to enjoy their right to freedom of membership in political associations of their choice and the free participation of these political groups and other associations in open political competition (Klaus, 2014). The rule of law and the supremacy of the Constitution ensure that all individuals are subject to and treated equally according to the law and that no one is exposed to arbitrary treatment by the state. This also means that all authorities, including armed forces and security forces, must obey the law. Legislative Acts of government should be enacted in conformity with the Constitution, which is both the supreme law at the domestic level and the foundation on which the exercise of all powers within the state is based. It encompasses the regular organization of free and fair elections as one of the principal means for ensuring popular participation in the constitution of the government and the monitoring of its performance (Idris, 2013).

Protection of the independence of the judiciary and the fostering of an autonomous and effective parliament are also critical issues in the governance system. It ensures the establishment of a functioning system of separation of powers between the Judiciary, the Legislature and the Executive. It evaluates the system of checks and balances within the branches of government. An independent Judiciary gives confidence to individuals, groups and corporate entities that the courts will protect their rights. It helps to foster an enabling environment that can promote economic growth and the reduction of poverty. An independent parliament that is alive to its oversight responsibilities is critical to the successful reduction of corruption and abuse of power by

Africa's many over-dominant executive presidencies tend to concentrate power on themselves. Prevention and reduction of intra and inter-state conflicts focuses on preventing and reducing intra- and inter-state conflicts with particular attention to the extent to which the country under review strives to sustain peace and security within its borders and to contribute to peace and stability in its neighbourhood (Klaus, 2014).

The promotion of cultural, civil and political liberties ensures that the integrity and rights of people are respected by the state, which should also take necessary steps to protect citizens' rights from violation either by its agents or a third party. The institutionalization of a system of due process involving competent judges who are able to apply the law independent of outside pressures and with impartiality is critical. *It* ensures that the will of the people constitutes the basis of the authority of the government. The popular will is measured through the right of citizens to participate directly and freely in the election of representatives and by the provision and effective enforcement of fundamental human rights. An effective civil society network is vital for the protection and promotion of rights. It measures the vibrancy and influence of civil society (Klaus, 2014).

This is designed to ensure the continuous accountability of officials, elected as well as nonelected, to the public. It ensures that public officeholders and civil servants are accountable, efficient and effective. It establishes the quality of service delivery and ensures the accountability of public officials to citizens. Good public service delivery enables citizens to express their views on the performance of the government and to hold civil servants accountable for their actions. Constitutional democracy also requires empowering people at the grassroots level through the decentralization mechanism that allows local communities to participate in decision-making affecting their destiny (Idris, 2013).

Promotion and protection of women's rights ensure that women have a meaningful status in the country and explore the frameworks necessary to deepen their participation further - political, economic, cultural, and social. Indicators also seek to encourage governments to provide evidence of women's empowerment in the domain of access to and control of productive resources and services, as well as their role in decision-making, including conflict prevention and resolution (Ajiye, 2014). Issues pertaining to women's rights which are not covered under this objective are treated exhaustively in the economic governance and socioeconomic development sections of the questionnaire

Corporate Governance is a system by which companies are directed and held to account, one that defines corporate governance as leadership, sustainability and good corporate citizenship (Agubata, 2018). It

comprises leadership, sustainability and corporate citizenship. Despite the use of the word corporate, more and more countries are applying corporate governance principles to all entities regardless of the manner and form of establishment and whether they are in the public, private or not-for-profit sectors. Corporate Governance involves the ethical principles, values and practices that facilitate holding the balance between economic and social goals and between individual and communal goals. The aim is to align the interests of individuals, corporations, and society as nearly as possible within a framework of sound governance and the common good. This definition rejects the traditional shareholder value approach to corporate governance, which is adopted in developed countries, such as the UK and the US, in favour of a stakeholder-inclusive approach.

In the stakeholder-inclusive approach, Boards should consider the legitimate interests and expectations of stakeholders on the basis that this is in the best interests of the organization in the long-term and not, as in the traditional shareholder value approach, merely as an instrument to serve the interests of shareholders, maximization of shareholder wealth and investor protection. Shareholders do not have any predetermined precedence over other stakeholders (Iganiga, 2010). The best interests of the organization are defined not in terms of maximizing shareholder wealth and protecting investors but within the parameters of the organization as a sustainable enterprise and as a corporate citizen (Agubata, 2018).

Corporate social responsibility, environmental issues and ethics are, therefore, included within the definition of corporate governance rather than being complementary disciplines as in the shareholder value approach. Corporate governance is also applied to all types of organizations, whether they are in the private, public or not-for-profit sectors (Edet & Samuel, 2018). Evidence is mounting that the adoption of good corporate practices across all three sectors (private, public and not-for-profit combined with good governance in those other areas covered by the APRM leads to improved sustainable performance, not just within the organizations but also for the country as a whole. This forms the rationale for the standards codes, and objectives adopted to guide corporate governance reform in Africa under the APRM.

Good corporate governance has eight distinguishing characteristics: discipline, transparency, independence, accountability, responsibility, fairness, ethical conduct and good corporate citizenship. These traits are important because they lead to better-performing organizations which are sustainable in the long term. This leads to economic development as these organizations contribute more to the economy and society as a whole directly through the wages, salaries and taxes they pay and indirectly through the money they pay to their supply chain, the vendors, retail outlets, service and training firms and resellers of their products and services.

Good corporate governance should apply to all forms of organizations on the continent, as many organizations in the public and not-for-profit sectors are the primary economic, advocacy and service delivery vehicles. To apply the concepts of good governance to just the private sector would, therefore, not bring widespread improvement. Most economies in Africa rely on agriculture, mining and other extractive industries that potentially may have adverse effects on the environment. Organizations should conduct their operations in a manner that meets existing needs without compromising the ability of future generations to meet their needs. It means having regard to the impact that the organization's operations have on the environmental, economic and social life of the community in which it operates. In addition, abject poverty, hunger and the scourge of pandemics such as HIV/AIDS, Malaria and Tuberculosis afflict many African communities. An organization, as well as an economic entity, is also a citizen of its country of operation and, as such, has a moral and social standing within that society, with all the responsibilities attached to that status. It should act as society would expect any good citizen.

Good corporate governance can also make it easier for organizations to raise capital and finance investments. Banks and investors have more confidence in organizations with good governance. Improved corporate governance in all forms of organizations in Africa, especially when done in the context of broader economic and systemic governance, will enhance the confidence of financial institutions and investors, both domestic and foreign. This objective focuses on the legal and administrative measures that are in place to facilitate economic activities, advocacy and service delivery, for example, incorporation laws, laws and regulations governing different types of organizations, permits and licenses, registering property, protecting investors, enforcement of contracts, and closing businesses.

In addition, the objective will also address the effectiveness of both government authorities and self-regulatory authorities in the implementation, delivery of services, regulation, monitoring and supervision of the independence, capacity and efficiency of the judiciary in the enforcement of laws and regulations relating to organizations, the availability of skilled professionals in areas relevant to good corporate governance, e.g. Company/chartered Secretaries, lawyers, accountants and auditors. In addition, the

objective will also address the informal sector and the regulatory frameworks for the financial institutions that support business. Issues such as infrastructure, e.g. roads, ICT systems and availability and reliability of energy supplies, should be dealt with under EGM. Most economies are split into three sectors.
The private sector is that part of the economy that is both run for private profit and is not controlled by the state. It includes family-owned businesses, private companies, micro, small, and medium enterprises, and the informal sector. The Public sector,sometimes referred to as the state sector, is a part of the state that deals with either the production, delivery or allocation of goods and services by and for the government or its citizens, whether national, regional or local/municipal. It includes state-owned enterprises/parastatals and public authorities or commissions. The Not-for-profit sectoris that part of the economy where organizations are non-profit and non-governmental. This sector is also called the third sector, in reference to the private sector and the public sector or the Voluntary or Civic sector, emphasizing the sector's relationship to civil society. It includes Nongovernmental Organizations, Community-Based Organizations, Umbrella Bodies, Apex Bodies and other related organizations.
It assesses the mechanisms and practices introduced in one's country to ensure more effective leadership and accountability of all the types of organizations listed in objective one above. Bodies that exercise leadership in an organization vary, including boards of directors, governors, trustees, and management committees. It may be difficult to assess whether leadership in a particular organization is effective or not, but corporate governance sets out certain practices to assist leaders in becoming more effective, and it is the adoption of these within organizations in your country that this objective is trying to assess.
The practices are the adoption of corporate governance and ethics codes, clear and comprehensive articles of association, trust deeds, etc., and robust and transparent procedures for the appointment of members of boards. No one dominant personality is on a board where the organization is using external capital. The use of non-executive and independent members of the Board where appropriate Board Charters to include matters reserved to the Board and those delegated to individuals or Board committees. The holding of regular board meetings. Board evaluations. Accountability refers to the accountability of the Board to the owners of the organization and, in certain circumstances, to key stakeholders. This involves the ethical behaviour of organizations both internally and externally. It will look at the development of codes of ethics and other practices to promote ethical behaviour, such as whistle-blowing regulations, the role of professional bodies in promoting ethical standards, the role of and challenges faced by the media in reporting unethical conduct, the level of ethical and unethical behaviour in organizations, regulations surrounding organizations making political donations.
In providing information in response to this objective, consideration should be given to the application of the African philosophy of teamwork and collaboration, which is known by many names throughout Africa, such as Ubuntu in South Africa. This philosophy considers the success of the group above that of the individual, 'I am because you are; you are because we are'. The section deals with money laundering and corruption. Political corruption is also addressed in the Democracy and Political Governance section. This focuses on the effectiveness of the laws and regulations that are in place to protect the interests of an organization's stakeholders.
Stakeholders include shareholders, employees, customers, suppliers, creditors, the community, the future generation and any other person with an interest in the organization. Although there are mechanisms in place in many African countries to protect the interests of many of these stakeholders, these have not always been effective. It deals with activities by organizations that go beyond the law and make that organization an excellent corporate citizen. An organization, as well as being an economic entity, is also a citizen of a country and, as such, has a moral and social standing within that country's society with all the responsibilities attached to that status. As such, an organization, when making decisions, should consider the impact of their decisions on their stakeholders, both internal and external, the environment and society as a whole. This objective focuses on how organizations fulfil these obligations.
Good Corporate citizenship is synonymous with corporate responsibility. Organizations carry out corporate responsibility projects in the following categories: Philanthropy:These projects can be broken down into projects that are 'feel good' projects (having minimal benefit for society or organizations in the long-term but making the organizations feel good), e.g. sponsoring an art project, or local sporting event that does not bring much publicity to the company, and projects that give a significant benefit to society in the long run but not much benefit to the organization e.g. funding a hospital, assisting a with country disaster recovery etc. Propagandaprojects give the organization much publicity and are usually part of their marketing campaign, but the benefit to society is short-lived, e.g., sponsoring a major football tournament. Partnering or networkingtypes of projects bring benefits to both the organization and society in the long

term, e.g. an accountancy firm partnering with a university to produce more accountancy graduates or a company partnering with either a health authority or NGO to provide services and products to reduce the impact of a particular disease such as HIV/AIDS, organizations partnering for environmental reasons. The five objectivesfor corporate governance under the APRM are Promoting an Enabling Environment and Effective Regulatory Framework for Business organizations and other entities, Ensuring Effective Leadership and Accountability of Organizations, Ensuring Ethical Conduct Within Organizations, ensuring that Organizations Treat Stakeholders Fairly and Equitably, ensuring that Organizations Act as Good Corporate Citizens.

Economic Governance and Management is the broad national economic policy framework, the institutions, processes and practices in place that are aimed at facilitating, supporting or otherwise promoting an economic climate that encourages growth, poverty reduction and the general welfare of the citizens (Abdulhamid, 2016). Good economic governance, including transparency in financial management, is an essential prerequisite for promoting economic growth and reducing poverty. Therefore, the establishment and consolidation of strong economies that can produce the wealth needed for investment in infrastructure and profit-making enterprises is fundamental. It is also equally important that such economies are organized and managed so as to ensure that the benefits of their expansion are broadly distributed across the population on a sustainable basis, taking into account the needs of both society and the environment. In order to attain specific goals, it is essential to implement appropriate governance measures. These measures should establish an economic policy environment that fosters growth, investment, and regional integration. The ultimate objective of such measures should be to improve the lives of all citizens through transformative means. (Utomi *et al.*, 2007). It is multipronged and focuses on the actions, policies and programmes that the relevant economic authorities (in particular, the state, regulatory agencies, and, to a lesser extent, businesses and business organizations) are adopting and implementing in managing the economy (Ayeni, 2008). This is done with an understanding that a dynamic economy is not sufficient in itself; that it must be complemented by appropriate systems and institutions that ensure the smooth functioning of markets, the combating of corruption, the regulation of capital flows and the equitable distribution of wealth to meet the needs of the people. In addition, the complete and meaningful involvement of the citizens in the conceptualization, formulation and implementation of these policies is a central principle that promotes shared ownership of the economy. This, in turn, is a significant factor in ensuring success and growth. It looks at the state of countries' economies, beginning with the overall policy trajectory or vision and the principles that underlie it (Abdulhamid, 2016).

The objectives of the APRM under this Theme: Design and implement economic policies for sustainable development, encourage ownership and participation of key stakeholders in policy formulation and implementation, promote sound public finance management, Fight corruption and money laundering, Accelerate and deepen regional integration in the monetary, trade and investment domain, Develop and implement trade and investment policies for promoting economic growth.

Sustainable Development means that economic growth and expanded opportunities to create wealth, generate employment and raise living standards are achieved without excessive costs to the environment, to the economic fundamentals or the population. This growth can continue in the long term. It is, therefore, important that economic policies are formulated and implemented in this light. The management of public finances has to be accountable, transparent, and efficient in order to achieve the desired effect on both the economy and the public's trust in the state's institutions (Wellington, 2015).

Corruption erodes the effectiveness of policies and programmes, as well as the trust of the public in institutions of governance. It further constitutes a drain on the meagre resources of the state and the overall economy (Ayeni, 2008). Therefore, it is essential to eradicate corrupt practices in the management and administration of public resources and institutions. While corruption is a Cross-Cutting Issue throughout this Questionnaire, the purpose of this section is to focus on corruption in public procurement, whereby both public and private actors involved in the procurement process may be tempted to divert public funds, goods or services for their personal use (Utomi *et al.*, 2007).

Money laundering can be defined as a process where the proceeds of a criminal activity are disguised to conceal their origin. By so doing, criminals introduce their dirty money into the financial sector, which enables them to avoid prosecution, conviction and confiscation of their criminal proceeds (Wellington, 2015). The harnessing and strengthening of inter-country economic complementarities is recognized as one of the pillars of economic growth. Therefore, African countries must design and implement policies that facilitate the deepening and acceleration of regional economic integration. Trade and investment are

recognized as critical drivers of economic growth. It is, therefore, important that African countries develop and
implement policies that encourage, protect and stimulate investment (local and foreign) and trade in order to accelerate economic growth (Rasak, 2014).

Sustainable socio-economic development involves continuous improvement in the well-being and the standard of living of the people, which could be summarized in terms of income, health, education, environment and freedoms. For the first three of these, per capita income, life expectancy at birth, infant mortality and adult literacy are the proxies to be measured and compared. In other words, sustainable socioeconomic development is a process that manages to combine the social, economic, and environmental aspects of development and establish a close link between these three pillars. Good governance is about appropriation, participation, responsiveness, accountability and sustainability. It constitutes the above link and one of the preconditions for sustainable development. Indeed, broad-based sustainable socio-economic development is by the people for the people, and the paradigm of building on the indigenous is, therefore, the necessary condition. The African masses themselves should own, participate and become the end and the means of their development. As indicated in the document on objectives, standards, criteria and indicators for APRM, the socio-economic development section is intended to highlight efforts and progress made in designing appropriate policies and delivery mechanisms in key social development areas (Ijere, 2014).

This effect, the following four objectives will be dealt with under this section:

Since economic growth alone does not automatically lead to sustainable socio-economic development and the elimination of poverty, African heads of state and government adopted 2001 the New Partnership for Africa's Development (NEPAD) with a view to eradicating poverty and alleviating other social and environmental impediments to sustainable growth and development. To this effect, the NEPAD underscores the importance of peace, security, democracy, sound economic management, human rights and good governance as preconditions for sustainable development. Good governance is also endorsed by the African Peer Review Mechanism (APRM).

The main objective of this mechanism, established in 2003 as part of the NEPAD, is to foster the adoption of policies, standards and practices that lead to political stability, high economic growth, sustainable development and accelerated sub-regional and continental economic integration. Good governance is characterized by appropriation, participation, responsiveness, accountability and sustainability. It is, therefore, internationally considered as the underlying conceptualization of broad-based sustainable socioeconomic development. Indeed, the_ promotion and acceleration of a broad-based sustainable socio-economic development will require a top-down and bottom-up approach in the formulation and implementation of policies and strategies geared towards reducing poverty and improving the overall well-being of the people. All stakeholders should own the whole process and actively participate in the promotion of self-reliance and capacity building for self-sustaining development.

To this effect, the country should first rely on its resources and allocate them wisely for development programmes with particular emphasis on inter-related key priority sectors such as agriculture, environment, health, education and infrastructure. Indeed, with a sharp population increase, land becoming less fertile, the disastrous over-exploitation of water and forest resources and low rainfall in most parts of Africa, there has been increasing poverty and a downward spiral of underdevelopment. The poorer you become, the less you eat, with less energy to work, and you do not produce enough, and the poorer you become. In order to shift from the pitfall of underdevelopment and take-off, there should be a clean break in the vicious circle (Pere, 2015).

The broad-based sustainable socio-economic development, together with its four objectives, constitutes the pathway if policies and strategies are carefully formulated and implemented with a monitoring and evaluation system to measure the progress and take necessary corrective measures before it is too late. To this effect, adequate human resources should be identified and developed in each priority sector and discipline area in order to, among other things, engage all stakeholders individually and collectively in the whole process. In addition, adequate financial resources should be mobilized first at the national level and then at regional and international levels to fill the needed gap. To ensure equity in the process, most disadvantaged people should be enabled to enhance their knowledge and manage their livelihoods, mainly when development initiatives affect their lives (Gradstein, 2014).

To this extent, the sustainable socio-economic development component of the APRM assessments is undertaken under a series of standards, codes, and objectives that are able to provide insight into the progress that African countries are making in terms of reducing inequalities, poverty and hunger through

improvement of agriculture production, food security, environment protection and affordable access to natural resources and essential services as development is about the well-being of present people without compromising the life of future generation (Gbensuglo, 2015).

Promoting and accelerating broad-based sustainable socioeconomic development objectives deals with the way member countries formulate appropriate policies and strategies for the promotion and acceleration of their socioeconomic development process. It is also intended to assess mechanisms and measures put in place for capacity building and financial resource mobilization, allocation and management. Participation of all stakeholders in the broad-based sustainable socio-economic development is essential as it involves people in the whole development process. Each citizen owns the concept and takes an active part in it. This second objective will, therefore, assess policies, strategies and incentive measures put in place to stimulate participation from public servants, the private sector, civil society and local communities. Poverty, unemployment and inequality are interrelated. It focuses on policies, strategies, mechanisms, and incentive measures geared towards reducing poverty and inequality through employment creation, education for all, and access to national resources and essential services.

This objective attempts to measure the progress made towards gender equality with particular emphasis on equal access to education for girls at all levels. It will ensure that gender equality is taken into account during the formulation and implementation of the national planning and development policies and strategies. It will try to understand how the government and other local stakeholders are combating gender inequality and giving equal rights, responsibilities and opportunities to women and men, in particular to girls and boys, in terms of access to education.

METHODOLOGY

The study adopts a survey research design method. The study used multiple regression approach to express the relationship among the variables. Nwankwo (2011) opined that a multiple regression approach is a form of research method that involves collecting data on two or more variables independent and computing them to find the relationship or association that exists between the variables and a dependable variable. The major purposes of multiple regression design are to explore causal relationships between variables and to predict scores on one variable from research participant's scores on other variables. A highly structured questionnaire was used as instrument for data collection. The study geographical area was Nigeria, however, selected states from each six geo-political zones were sampled for data collection. Data collected for the study were presented using statistical tools, while multiple regression analysis using ANOVA was adopted to analyse the variables in the *models* under study.

The model for the study is therefore stated thus in functional form:

Model One

$SED = f(SER, SPE, PDM, ATF, PGE, BPD)$ 1

$SED = \alpha + \beta_1 SER + \beta_2 SPE + \beta_3 PDM + \beta_4 ATF + \beta_5 PGE + \beta_6 BPD$ 2

To account for other indices not included in the model we introduce the stochastic variable.

$SED = \alpha + \beta_1 SER + \beta_2 SPE + \beta_3 PDM + \beta_4 ATF + \beta_5 PGE + + e$ …………3

Where:

SED = Socio-economic Development
SER = Self-reliance in Development
SPE = Sustainable Development and Poverty Eradication
PDM = Policy Delivery Mechanism
ATS = Access to health Facilities
PGE = Progress towards Gender Equity
BPD = Broad based participation in Development
α = slope, β_1 — β_5 = Coefficients and e = stochastic variable, which shows the influence of other indices affecting the dependent variable.

RESULT AND DISCUSSIONS

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,777[s]	.603	.599	.66708

Predictors: (Constant), SER, SPE, PDM, ATF, PGE, BPD

Source: SPSS 20.0

Table 2: Coefficients[3]

Model	Unstandardized Coefficients	
	B	Std. errors
(Constant)	.236	.183
SER	.848	.074
SPE	.029	.022
1 PDM	.158	.053
ATF	.788	.065
PGE	.154	.061
BPD	.099	.071

Dependent Variable: Socio-economic _Development

Source: SPSS 20.0

The analysis result shown on Table 1 .0, 1 .2 and 1.3 above presents the result of the relationship between Socioeconomic Development (SED) and various independent variables. The result of the regression estimate from Table 1.3 above indicate that there is a positive relationship between Socio-economic Development (SED) and Self-reliance in Development (SER). This is evidenced by coefficient value of 0.848. Statistically, the Sig. value of 0.000 is lower than the acceptable significance value of 0.05. This means that Socio-economic Development (SED) significantly relate to Self-reliance in Development (SER). Sustainable Development and Poverty Eradication (SPE) has coefficient value of 0.029. Statistically, the Sig. value of 0.188 is higher than the acceptable significance value of 0.05. This means that SPE is not significantly related to SED.

Also Policy Delivery Mechanism (PDM) was observed to be positively related to Socioeconomic Development (SED) with a coefficient value of 0.158 and a Sig. value of 0.003. Access to Health Facilities (ATF) from the result has a positive and significant effect on Socioeconomic Development (SED). This evidenced by a coefficient and Sig. value of 0.788 and 0.000 respectively. Furthermore, Progress towards Gender Equality (PGE) has a coefficient value of 0.154 and a Sig. value of 0.011, indicating that PGE has a positive and significant effect on SED. Finally, Broad based participation in Development (BPD) has a coefficient value of 0.099 and a Sig. value of 0.165, indicating that BPD has a positive but insignificant effect on SED.

African nationalists that were at the vanguard of nominal flag independence from the former colonial overlords were reputed to be disdainful of democracy. This was apparently as a result of rather peculiar understanding of democracy as inherently laden with disputations or even conflict, rather than seeing democracy as providing institutional mechanism for negotiation and reconciliation of differences and disputes. Furthermore, according to the nationalist protagonists of the authoritarian idea, the realities of ethnic pluralism across Africa having the potentiality for ethnicbased conflict are rather high, therefore, it is necessary for people to be governed with a great deal of regimentation and control, in order to avoid threat to national development or integration. But the protagonists of the authoritarian argument had conveniently glossed over the realities of African rich tradition of democratic culture, a democratic tradition that used to involve many hours of consensual problem solving in the village square or compound with the monarch or chiefs in attendance.

It is worthy to not that traditional African political systems were infused with democratic values. They were invariably patrimonial, and consciousness was communal; everything was everybody's business, engendering a strong emphasis on participation. Standards of accountability were even stricter than in Western societies. Chiefs were answerable not only for their own actions but for natural catastrophes such as famine, epidemics, floods, and drought. This can lead to exile of a leader found wanting.

The hallmark of socio-political empowerment is an effective form of popular participation in decision-making that affects vested interests of cross sections of the society on both routine and periodic levels. Mass participation in enactment of power significantly involves an electoral institutional mechanism for

voting by the masses for the ruling elite in order to spearhead the political commanding heights of governance. But there are other components of mass popular political empowerment for articulating and agitating for particular vested interests as well. Various autonomous groups and institutions, such as civil rights associations, farmers' associations, women's associations, trade unions, professional associations, chambers of commerce, among others, are some of the other forms of institutional means of popular empowerment.

CONCLUSION AND RECOMMENDATIONS

The state is expected to facilitate and nurture institutional means of popular socio-political empowerment as critical aspects of socialism for responsible leadership and the humanization of existential conditions of life. In Africa, social vices as relating to political tension, terrorism and war have forced people to move within countries or abroad in search of basic safety, security and tenable social welfare. Conflict-induced displacement includes those who are forced to flee their homes for one or more of the following reasons and where the relevant authorities are unable or unwilling to protect them. Armed conflict, including generalized violence and persecution on the grounds of nationality, race, religion, political opinion or social group, also contribute largely to this matter. Forced migration also occurs in response to border disputes, which have led to violent conflicts in several countries.

Although there is economic evidence of the welfare-enhancing effect of the liberalization of labour, detractors of migration emphasize both the dampening effect on socioeconomic differentials in destination countries and the impact of what has become known as brain drain in origin Countries. With regard to the latter, it has been argued that social migration has a robust education-related selection bias, whereby more educated people feel more of themselves, leading to the disparity phenomenon. As a result, developing countries are perceived to be suffering from the loss of their valued cultural practices. In conclusion, socio-economic development in Africa is primarily challenged by conflicts and inadequate infrastructure, which t K, in turn, leads to unsolicited migration of both material and human resources.

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SUB THEME
DIGITAL INNOVATION, BUSINESS SUSTAINABILITY AND ECONOMIC DEVELOPMENT

THE SOCIAL MEDIA AND HUMAN RESOURCE MANAGEMENT IN NIGERIA: HARNESSING OPPORTUNITIES AND MITIGATING CHALLENGES

Onuba, Chinwe O., Chukwuka, Ekene, U. and Anikwe, Sunday O.
Department of Industrial Relations and Personnel Management
Michael Okpara University of Agriculture, Umudike

ABSTRACT
The study focused on social media and human resource management in Nigeria with an emphasis on evident opportunities and challenges. Social media has dramatically changed the narrative of human resource management in Nigeria's private and public sector organizations or businesses. In recent times all human resource management-related activities which include human resource planning, recruitment, selection and placement, employee training and development; and others have been affected by the opportunities presented by social media and at the same time new challenges presented by information, communication and technology is being faced by most of these organizations. It is obvious that the advent of social media as an information, communication, and technology platform has increased the efficiency and effectiveness of most management processes. The study population comprises 300 staff of First Bank Insurance Aba Area comprising branch offices in Abia and Imo state. A sample population of 171 staff was randomly selected from the population of the study. Responses from research questions and hypotheses raised were rated and validated using simple percentages and a 5-point Likert scale. The findings revealed that there is a positive link between social media and effective human resource management. Also, it was observed that social media has necessitated increased organizational productivity in recent times. Based on the findings, it was recommended that organizations whether public or private should invest more in information, communication, and technology in order to harness opportunities thereof and at the same time address the challenges presented.
Keywords: Social Media, Human Resource, ICT, Organization

INTRODUCTION
Human resource management describes the process of acquiring, training, appraising, and compensating employees as well as attending to labour relations, health, and safety concerns (Abah, 2012). The importance of human resource in every organization has been such that cannot be overlooked. This is so because every other resource and factor needed for effective service delivery in an organization is affected by the effectiveness and efficiency of the human resource. Over the years, human resource management has focused on such things as talent, education, skill, experience, and training among others. As such considering this, the success or failure of any organization is largely dependent on the human resource available as well as their skills, ideas, knowledge, satisfaction, commitment, zeal, and determination as it concerns organizational goals (Aziz, 2009; Emerole *et al.*, 2012).

Social media in recent times have impacted businesses and has brought about ease of doing business and at the same time emphasizing productivity, effectiveness, and efficiency. Social media have millions of users and the number is continuously increasing each year. Social Media is powered by Web 2.0 which allows individual interactions with the aid of technological devices such as desktops, laptops, and mobile phones.Social media has been described as a collective term describing websites and applications that focus on communication, community-based interaction, content sharing, and collaborations (Ibiyeye, 2023). Forms of social media will include blogs, podcasts, photo-sharing sites, video-sharing platforms and others. Most of the popular social media applications include Facebook, Facebook Messenger, LinkedIn, Instagram, TikTok, WhatsApp, YouTube, Telegram, Skype, Zoom, Likee, Twitter, etc. It is no longer arguable that organizations no longer rely on the traditional means of managing their human and material resources. Prevalent changes necessitated by information, communication, and technology have both presented opportunities and at the same time challenges to most of these organizations.

All human resource management-related activities which include human resource planning, recruitment, selection and placement, employee training and development; and others have been affected by the opportunities presented by social media. The upsurge of the COVID-19 pandemic and the need for organizational activities to remain ongoing even in the pandemic period has highlighted the need to adjust

to the possibilities presented by information, communication, and technology, especially in developing countries like Nigeria (Onuba & Ndubuisi, 2020). The utilization of social media to access required information by organizations is increasing in recent times and this has gone beyond talent search, recruitment, and selection. Apart from accessing behavioural information and job-related information, organizations can also embark on corporate branding through social media (Andrews, 2012). Also, recently it has been observed that information made available by social mediais being used by the human resource departments in organizations for attracting and recruiting talents, selection and pre-employment background checks, internal communication, training, onboarding, and team-building. For instance, many organizations at present create and operate their own organizational Facebook and LinkedIn profiles or pages and use pages as a means of advertisement for attracting and getting talent (Agnes *et al*., 2017; Hosain & Liu, 2020).

The human resource has been described as the ultimate resource of every organization considering the important role played in harmonizing and putting to good use other resources and factors available to the organization. Considering this, human resource management over the years has continuously experienced changes and adjustments due to societal or environmental changes. The increasing role of information, communication, and technology in every aspect of life is also affecting the human resource management concerns of most organizations, especially in developing countries (Onuba & Ndubuisi, 2020). The effect and adjustment witnessed during the COVID-19 pandemic give credence to this argument that organizations must adjust to prevailing changes if they must continue to be productive. The challenge of efficiency and effectiveness in human resource management activities of organizations like sourcing, selection, recruitment, training, internal communication, and even team building as it affects employees and the management of most organizations is being addressed by opportunities presented through social media information (Aziz, 2009; Yassen & Yussef, 2016). In most cases, organizations are seen engaging in organizational branding through social media. Pages and profiles are carefully created with the required details to effectively showcase the organization to its catchment population. Not only are these human resource activities becoming more effective and efficient, but at the same time, cost is being managed (Kissen & Buttgen, 2015). Given this scenario, one begins to wonder whether organizations in most developing countries like Nigeria are prepared for these opportunities and the challenges presented by social media. Thus, the objective of this study is to examine the nexus between social media and human resource management, particularly assessing the potential link between social media and organizational productivity.

LTERATURE REVIEW

Theoretical Framework of Analysis

The study adopts the contingency theory as a framework to analyse the subject of study. Thus, the contingency theory explains the need to achieve desired result putting into consideration present realities. This suggests that organizations must first consider the maximization of opportunities in its policies and programmes. Hence, managers are supposed to act putting into consideration environmental factors both internal and external to the organization in relation to maximization of opportunities presented (Delery & Doty, 1996; Onuba & Ndubuisi, 2020). Applying the contingency theory to the subject of the paper, it is worth arguing that it has become really necessary for organizations in the developing countries like Nigeria to ensure their human resource management conform to the opportunities provided by information, communication and technology mediums like the social media. Information technology development has become a contingency plan to ensure that organization adapt to the evident changes that would ensure effective service delivery. and done in a better way.

Concept of Social Media

Social media has been described as a collective term describing websites and applications that focus on communication, community-based interaction, content sharing, and collaborations (Ibiyeye, 2023). This also can be explained as websites and programmes or computer technology that help people interact with each other, share information and ideas, and work together (https://economictimes.indiatimes.com/definition/social-media).Social media is an information-sharing network and is powered by Web 2.0 which allows individual interactions with the aid of technological devices such as desktops, laptops, and mobile phones (Hosain & Liu, 2020). Forms of social media will include blogs, podcasts, photo-sharing sites, video-sharing platforms and others. Most of the popular social media applications include Facebook, Facebook Messenger, LinkedIn, Instagram, TikTok, WhatsApp, YouTube, Telegram, Skype, Zoom, Likee, Twitter, etc.

Politics, education, health, and even businesses in developing countries like Nigeria in recent times have experienced a shift from the traditional way of getting things done to new ways enabled by information, communication, and technology. This includes sharing photos, blogging, social networks, sharing videos, business networks, virtual worlds, and more (Onuba & Ndubuisi, 2020). Most people use different social media platforms to search for job opportunities, find people worldwide who share their interests, and share their ideas, opinions, insights, and feelings, and in most cases used in the mobilization of people to take action. People who do these things are part of a social network online. Organizations through social networking have been able to meet their business needs using the platform to reach out and engage customers, increase sales through digital advertising, market research, and promotion, monitor consumer trends, and help build relationships with the teeming customer population. It makes it easier for customers to connect and lets e-commerce sites add social features (Andrews, 2012; Kissel & Buttgen, 2015).

Impact of Social Media on Human Resource Management

Human resource management describes the process of acquiring, training, appraising, and compensating employees as well as attending to labour relations, health, and safety concerns (Ufomba, 2011). The importance of human resources in every organization has been such that cannot be overlooked. This is so because every other resource and factor needed for effective service delivery in an organization is affected by the effectiveness and efficiency of the human resource. Emerole *et al.* (2012), identify the functions of the human resource department as the following:

- Human resource planning
- Recruitment, Selection and Placement
- Employee training and development
- Performance appraisal
- Promotion, transfer, lay-offs and retirements
- Employee fair treatment, discipline and dismissal
- Employee compensation and security
- Employee health and safety administration and others.

The question now is whether organizations and their human resource department in developing countries like Nigeria can effectively actualize the above-stated roles by harnessing the possibilities provided by information, communication, and technology. Unlike what is obtainable in the developed countries of the world where information technology has improved human resource management through a hold on all organizational activities created to harness human resource management, the developing countries of the world are still battling with lack of technology needed for the close of this gap, lack of needed exposure and even required resources and commitment towards benefiting from the prospects. Social media is all about a digital platform for interaction, connection, and content making and sharing by users. In today's world, most of our activities daily are connected to social media. Most of the time, people use social media to connect with others, get news and information, and make decisions.

In developing countries such as Nigeria, organizations through social networking have been able to meet their business needs by reaching out and engaging the customer population, increasing sales through market research, digital advertising, and sales promotion. Recent studies have also highlighted how most organizations have resorted to the use of social media platforms to monitor consumer trends and help build relationships with their teeming customer population. Thus, social media in recent times has impacted businesses and has brought about ease of doing business and at the same time emphasizing productivity, effectiveness, and efficiency.

The utilization of social media to access required information by organizations has been increasing in recent times especially as it affects strengthening human resource needs and development. As such this has gone beyond the search for required skill or talent, recruitment, and selection but is now tipping seriously to such areas as behavioural study of employees, cooperate branding, and intensive customer relationship (Kissel & Buttgen, 2015). Recently, it has been observed that information made available by social media is used by the human resource departments in organizations for attracting and recruiting talents, selection and pre-employment background checks, internal communication, training, on boarding, and team-building. For instance, many organizations at present create and operate their own organizational Facebook and LinkedIn profiles or pages and use pages as a means of advertisement for attracting and getting the required skills or talent needed by the organization (Abah, 2012; Hosain & Liu, 2020).

It has been observed that developing nations are also experiencing a positive shift in the utilization of the internet and social media. It is recorded that such utilization rose from 42% in 2013 to 64% in 2018

regarding internet usage and 34% from 2013 to 53% in 2018 regarding social media usage (Pew Research Center, 2018). Considering the fact that the above data is continuously increasing, the utilization of social media for employment purposes is expected to show an upward trend in both developed and developing countries alike. Most of the benefits associated with the use of social media platforms and social media information for human resource management activities like recruitment include cost and time-saving benefits, access to several hidden inaccessible information such as personality, behavioural prototypes, hobbies, interests, and types of friend networks, re-examination and authenticating of information previously supplied, access to ready and steady workforce, taking responsibility for employment done having accessed information on the employee (Tripathy & Kaur, 2012; Agnes *et al.*, 2017). Such an obligation is to avoid negligent hiring for they can be accused in the future. Hence, they should gain as much information as possible regarding the job candidate. For instance, introducing a job advert on a social media platform is almost free and such advertisement information can be modified if necessary or any error corrected. On the contrary, an organization publishing a job advert in a newspaper or buying a web domain has to spend money.

For developing countries like Nigeria, it was observed that during theCOVID-19 pandemic organizational activities starting from recruitment, training, placement, and even remuneration was constrained due to lack of basic technological know-how and communication deficiency within such organizations located in developing countries like Nigeria (Onuba & Ndubuisi, 2020). Most organizations located in this region of the world have really been adamant about the demands of the changing business environment and requirements and as such are finding it really difficult to adapt to the changing times. Whereas organizations and businesses in most developed countries of the world via most social media platforms have increasingly witnessed strengthened human resource management and development capacity and at the same time harnessing opportunities made available through such social media information in strengthening the quality of services and products, the same cannot be said in countries like Nigeria (Abah, 2012; Onuba & Ndubuisi, 2020).

Developing countries like Nigeria are still battling with network providers providing stable communication networks for organizational online engagements even with the development of such social networking conference platforms like Zoom and the like. Obtaining imprecise, forged, or partial information have remained another challenge faced by most human resource department of organizations (Yassen & Yussef, 2016; Onuba & Ndubuisi, 2020). Information most at times posted may not be correct and may portray the profile holder to be adequate or inadequate in the eyes of the intended audience while it is not actually so. Social media information assessed may also be obsolete and may or may not reflect what the applicant actually looks like presently. Thus, the information relied on may be misleading for employers who may rely on such for pre-employment background checks (Chen & Sharma, 2015; Baert, 2017). In most cases, depending more on social media information may result in wrong judgement or assessment. As such the usability of such information gathered would be questionable, hence would require more study to validate.

METHODOLOGY

The study made use of a survey design. Thus, focusing on a representative sample to validate answers before a generalization is made on the basis of data collected. A survey design is used to collect primary data through a questionnaire, administered 300 staff of First Bank Insurance Aba Area comprising branch offices in Abia and Imo state (Source: Personnel Unit FBN Insurance Aba Area). From this population, a sample of 171 was selected using Taro Yamane formula was used.

To ensure the validity and reliability of the research instrument for this study, the research presented the instrument (questionnaire) to the top management and middle management staff of the sample population studied.

To analyse the data collected in the study, the researcher used mean frequency in line with simple percentage and chi-square. Mean frequency (in line with Likert's five-point scale) was used to analyse the percentage responses of the respondents in any given item in the questionnaire. The mean statistics in line with simple percentage was used because it helps in data analysis especially where the questionnaire was used as research instrument. The simple percentage format of Likert five-point scale was therefore used to rate the level of respondent's agreement or disagreement with each attribute. The points are assigned in the following manner:

- A respondent that strongly agreed to the point (SA) scored 5 points
- A respondent that agreed (A) scored 4 points
- A respondent who was undecided (UD) scored 3 points

- A respondent that disagreed (D) scored 2 points
- A respondent that strongly disagreed (SD) scored 1 point

The researcher therefore adopts a cutoff point of 2.50 mean score. Thus, any response/attribute with a mean score up to 2.50 and above is accepted and below 2.50 is therefore rejected.

Simple percentage formula is given as follows;

$$\frac{X}{N} \times \frac{100}{1}$$

Also,

$$\frac{\sum X}{\sum F}$$

Where,

X = True outcome

N = Total number of possible outcomes.

$\sum X$ = calculation of total number of observations in the X variable

$\sum F$ = calculation of total number of observations in the F variable

RESULTS AND DISCUSSIONS

Research Question 1:

Do you agree there is a positive link between social media and effective organizational planning?

Table 1: Responses on if there is a positive link between social media and effective organizational planning

Options	F	Percentage (%)	X	Percentage (%)
Strongly Agreed	50	29.4	250	39.7
Agreed	77	45.2	308	48.0
Undecided	4	2.4	12	1.9
Disagreed	20	12.1	40	6.4
Strongly Disagreed	19	11.2	19	3.0
Total	**170**	**100**	**629**	**100**

Source: Survey

$$\frac{\sum X}{\sum F} = \frac{629}{170} = 3.7$$

Responses from Table 1 above indicate that 29.4% strongly agree, 45.2% agree, 2.4% are undecided and 12.1% disagree while 11.2% strongly disagree. Since the result in the above table is above 2.5, we therefore accept that there is a positive link between social media and effective organizational planning.

Research Question 2:

Do you agree that there is a positive link between social media information and effective recruitment of employees?

Table 2: Responses on whether there is a positive link between social media information and effective recruitment of employees.

Options	F	Percentage (%)	X	Percentage (%)
Strongly Agreed	60	35.2	300	52.1
Agreed	40	24.0	160	27.8
Undecided	5	2.9	15	2.6
Disagreed	36	21.2	72	12.5
Strongly Disagreed	29	17.1	29	5.0
Total	**170**	**100**	**576**	**100**

Source: Survey

$$\frac{\sum X}{\sum F} = \frac{576}{170} = 3.4$$

Responses from Table 2 above indicate that 35.2% of the respondents strongly agree, 24.0% agree, 2.9% are undecided and 21.2% disagree, while 17.1% strongly disagree. Since our result in the above table is above 2.5, we, therefore, accept that there is a positive link between social media information and effective recruitment of employees.

Testing and Interpretation of Hypotheses

To validate the hypotheses earlier stated in chapter one, the researcher adopted simple percentages and chi-square.

Ho1: There is no positive link between social media and effective human resource management in organizations in Nigeria

Table 3: Response on whether there is a positive link between social media and effective human resource management in organizations in Nigeria.

Options	F	Percentage (%)	X	Percentage (%)
Strongly Agreed	50	29.4	250	44.6
Agreed	50	29.4	200	35.7
Undecided	10	5.9	30	5.4
Disagreed	20	11.8	40	7.1
Strongly Disagreed	40	24.0	40	7.1
Total	170	100	560	100

Source: Survey

$$\frac{\sum X}{\sum F} = \frac{560}{170} = 3.2$$

From the responses in the table 3 above, 29.4% of the 170 respondents strongly agree, 29.4% agree, 5.9% were undecided, 11.8% disagree and 24.0% of the respondents strongly disagree. Since our result in the above table is above 2.5, we therefore reject null hypothesis that there is no positive link between social media and effective human resource management in organizations in Nigeria.

Decision Rule

Since the calculated mean score is 3.2 and is greater than the cut-off point of 2.5, we accept the attribute that there is a positive link between social media and effective human resource management in organizations in Nigeria.

Ho2: There is no positive link between social media and organizational productivity in organizations in Nigeria

Table 4: Response on whether there is a positive link between social media and organizational productivity in organizations in Nigeria

Options	**F**	**Percentage (%)**	**X**	**Percentage (%)**
Strongly Agreed	71	42.1	355	54.1
Agreed	58	34.1	232	35.4
Undecided	8	4.7	24	3.7
Disagreed	12	7.1	24	3.7
Strongly Disagreed	21	12.3	21	3.2
Total	**170**	**100**	**656**	**100**

Source: Survey

$$\frac{\sum X}{\sum F} = \frac{656}{170} = 3.8$$

From the responses in Table 4 above 42.1% of the respondents strongly agree, 34.1% agree, 4.7% are undecided, 7.1% disagree and 12.3% strongly disagree. Since our result in the above table is above 2.5, we therefore accept that there is a positive link between social media and organizational productivity in organizations in Nigeria.

Decision Rule

Since the calculated mean score is 3.8 and is greater than the cut-off point of 2.5, we accept the attribute there is a positive link between social media and organizational productivity in organizations in Nigeria.

CONCLUSION AND RECOMMENDATIONS

There is no doubt that nowadays, social media information is being used by the human resource departments of organizations for a number of functions such as attracting and acquiring (recruitment) talents, selection and pre-employment background checks, internal communication, training, onboarding, and team-building (Emerole *et al.*, 2012; Agnes, Radmila & Nemanja, 2017). The opportunities presented by social media to organizations have remained progressive as each year goes by. Many of the opportunities or benefits made possible through social media include cost-saving, time-saving, access to inaccessible information, re-examination and authenticating of information previously supplied, access to a ready and steady workforce, and taking responsibility for employment done having accessed information on the employee. All these and more have enhanced the deployment of the best skills and talent in organizations thus ensuring efficiency, effectiveness and enhanced productivity (Kluemper, 2013).

The question has remained whether organizations and their human resource department in developing countries like Nigeria can effectively utilize opportunities presented by social media by harnessing the possibilities provided by information, communication, and technology. Unlike what is obtainable in the developed countries of the world where information technology has improved human resource management through a firm grip on all organizational activities created to harness human resource management, the developing countries of the world are still battling with lack of technology needed for the close of this gap, lack of needed exposure and even required resources and commitment towards benefiting from the prospects. Considering all these, we recommend the following:

- Security measures must be taken whilst using such a network maintaining uniformity with existing local and international legal guidelines and conventions.
- employers and employees are well-concerned of the fundamental lawful and ethical basics regarding the latest utilizations in fulfilling organizational and business objectives.
- Human Resource department of organizations should not rely solely on information provided by employees on their social media profiles or pages, especially in pre-employment cases.
- Organizations whether public or private must develop capacity to adequately equip their human resource department with the required technical know-how to effectively utilize such digital platforms like the social media to ensure optimum service delivery.
- Information technology should be developed through sensitization and putting in place the needed infrastructure that will be supported that by the government and both public and private sector organizations.

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POPULATION GROWTH AND ENVIRONMENTAL QUALITY IN NIGERIA

[1]Nnadi Paschal C., [1]Anumudu, Charles N., [1]Orizu, Uchendu I., [2]Nwaigbo, [1]Chinedu T., [1]Osuagwu, Felicia O. and [1]Azubuike, Ogbonna A.
[1]Michael Okpara University of Agriculture, Umudike
[2]Federal College of Land Resources Technology, Owerri.
Corresponding author: nnadipaschal45@gmail.com

ABSTRACT
The main objective of this study is to investigate the relationship between population growth and environmental quality in Nigeria. In the course of this investigation, population growth was dissected into two, namely rural and urban population. The data used in this study ranged between 1981 and 2022. Environmental quality (proxied by CO2 Emission) was used as the dependent variable. Variables such as urban population growth, rural population growth, real GDP per capita, and renewable energy consumption were used as independent variables. The Philip-Perron test and the ARDL Bound techniques were employed in the study. From the various findings, rural population growth does not have a significant effect on environmental quality in Nigeria, in both the short-run and long-run. It was also discovered that Environmental Kuznets Hypothesis (EKC) exists in Nigeria, based on available data and the time of this study. From the recommendations given, Nigeria has the potential to improve environmental quality through local investment and consumption of renewable energy resources, population control, and other measures that increase awareness for energy mix transition in Nigeria as a developing country. Creating awareness about the grave importance of energy mix transition in rural area is also paramount in Nigeria at this time.
Keywords: Population, Environmental quality, EKC, ARDL, Wald Test, Nigeria

INTRODUCTION
In the world of technology and climate change, the problem of energy consumption and transition is one of the serious debates in environmental economics. There has been a need for energy transition from non-renewable (fossil, coal) to renewable sources (biofuel, thermal, solar). The fossil fuel consumption, for example, results to the emission of carbon into the atmosphere which, according to Asogwa and Anumudu (2022), necessitates the rationalisation of energy transition as a sustainable source of energy for the reduction of global warming caused by Carbon Dioxide (CO2) emissions and, at the same time, improving the growth of Nigerian economy.
However, urbanization has become a major trend in today's world. According to Nizic and Baresa (2013), a large proportion of the world's population is living in urban centers, and by a projection, the proportion of the global population living in urban centers will grow by 60% by the end of 2030. From 2000 to 2015, the urban population growth rate in Sub-Saharan African countries increased from 24.63% to 67.23%; and globally speaking, urban population growth is close to 55% of the world population, and this percentage is believed to increase to 68% by the end of 2055 (United Nations, 2018; Alnour *et al.*, 2022). However, the struggle to migrate to cities keeps rising, and the rate is higher in the developing world than in the developed world (Ikporukpo, 2018). Economically speaking, the 50 biggest cities in the world have a joint gross domestic product (GDP) of 9.6 trillion Dollars; this is more than China's GDP and only second to the US economy (World Bank, 2010).
Conversely, the rural population accounts for about 70% of poor people in the developing world (IFAD, 2010). The rural area is a spatial category comprising people and other features that define a place of living related to certain patterns of human activity. However, those relationships are subject to continuous change because of advancements and migrations of people to well-developed regions within and outside their countries. Nearly half of the world's population is estimated to live in rural areas, approximately 3.3 billion people, and 90% live in rural places in developing countries, including Nigeria (Carr & Raholijao, 2014).
Population growth is important in determining the level of CO2 emissions in the environment (Shaari *et al.*, 2021); C02 emissions are less prevalent in rural areas than urban centers. Shaari *et al*. (2021) further discovered that rural population growth does not cause any change in CO2 emissions; this does not mean that rural population does not cause a change in other environmental variables such as forest reserves and energy consumption. According to Yahaya *et al*. (2020), more of the Nigerian population is concentrated

in urban areas. However, there is still a need to look at how much impact on the environment is caused by those who remain and grow in rural areas, mainly poor people.

The negative impacts of population growth on the environment continue to evoke serious concern in developing countries, which lack the technical capacity for a proper energy mix transition in the modern times. These negative consequences, as listed by Theodore (2006), include depletion of non-renewable energy sources as a result of high energy consumption (coal, crude oil, etc), land degradation, climate/weather change caused by high CO2 emissions, high rural-urban migration, pollution, etc. Overdependence on non-renewable energy sources in most developing nations of the African continent is part of the reasons for widespread health-related problems and large number of human and animal deaths each year (Edeme and Nnadi, 2018); these deaths are preventable through energy transition from carbon-related to carbon-free energy sources such as solar energy. Regrettably, these green energy sources are not fully adopted in countries like Nigeria where less resources are invested in renewable energy technologies for adoption. Also in Nigeria, the increasing level of urban population has also resulted to a rise in CO2 emissions and the depletion of arable lands for the cultivation of food products for man's survival (Abughlelesha & Lateh, 2013; Sambe *et al*., 2018).

Most countries in Africa are still massively imbued into the primitive society, especially the rural population, where agriculture is their maximum source of livelihood. Massive dependence on subsistent agriculture implies a negligence of the necessary renewable technologies to move the country into the green economy, which would reduce the level of CO2 emissions exerted into the atmosphere.

Several studies have made efforts in investigating the relationship between population growth and carbon emission levels in Nigeria and outside. For instance, Shaari *et al* (2021) investigated the impact of energy use, rural population and economic growth on CO2 emissions in nine selected developing nations, using the panel ARDL method. This study found that economic growth and energy use increase CO2 emissions in both the long-run and short-run, while rural population growth does not affect CO2 emissions in the short-run. On the contrary, Yahaya *et al* (2020) discovered that economic growth reduces environmental pollution in Nigeria; energy resources, population density and income growth increases environmental degradation in the short-run. Using a stepwise regression and an error correction (ECM) models, Asogwa and Anumudu (2022) examined the effects of renewable energy use on output growth convergence, and the impacts of renewable energy use for an alternative to the reduction of carbon emission (CO2) levels in sub-Saharan Africa. One of the important contributions made is that adoption of renewable energy is insignificant as a solution to the reduction of CO2 emission in the selected countries under study. Because there is low level of policies guiding the adoption of renewable energy technologies in the region. More so, using the ARDL Bound technique, Purnama *et al.* (2020) found that urbanisation has no significant influence on environmental quality in Indonesia; also, the study found that the Environmental Kuznets Hypothesis does not exist in Indonesia because growth in the country's GDP increases CO2 emission levels in the country, which adds to the environmental debate faced by any country on the verge of growth and advancement. In line with various identified problems, the main objective of this study is to investigate the relationship between population growth and environmental quality in Nigeria, with specific objectives which include the following: (i) Analyse the relationships that exist among rural and urban population growth rates and environmental quality in Nigeria (ii) Investigate the effect of rural population growth on environmental quality in Nigeria (iii) Investigate if there exists a long-run relationship between economic growth and environmental quality in Nigeria.

LITERATURE REVIEW

Theoretical Background

This study adopts the neoclassical model and the Environmental Kuznets Curve (EKC) hypothesis. First, the neoclassical model assumes that population growth increases the level of poverty in a country, especially in a developing country. Scarcity of land and housing facilities motivates poor people to move to ecologically sensitive areas, thereby causing environmental degradation as a result of exploitation of natural resources (Jhingan, 2013). The realities of poor waste disposal and management, as well as local production technology indicate a poor situation of a people and non-implementation of environmental policies in a country (Adejumo, 2020).

The Environmental Kuznets Curve Hypothesis, on the other hand, argues that the quality of the environment is related to GDP per capita in the form of an inverted-U, such that the higher the growth of economic activities in a country, the lower the amount of poor people in the country, in terms of their per capita income (Owolabi *et al*, 2019). Consequently, education, health and poverty, among a variety of

economic indicators, are related to GDP per capita. Maintaining a good environment helps to improve these economic actors. From the EKC argument, initially, economic growth worsens environmental quality as growth requires more resources to produce and consume goods and services, which results in more pollution and waste; Kuznets refers to this as a scale effect. As the economy advances in time, it brings a structural change from energy intensive-based activities to less pollutant technology-based activities, replacing the old with green technologies. This new process consequently improves environmental quality, creating an inverted U-shaped relationship between pollution and economic growth (Ulucak & Bilgili, 2018). This is referred to as technical and composition effect.
Modern studies confirm that as economic activity rises, the level of environmental damage is corrected. This comes majorly from technical factors rather than a mere reduction in the consumption of environmental resources. Most modern contributions to this theory believe that the EKC should be an N-shaped relationship between environmental quality and economic growth. The latest theoretical development assumes that if innovation potential is fully exhausted, then the technological obsolescence effect might outgrow the scale effect and ultimately damage the environment more drastically, creating an N-shaped Environmental Kuznets Curve (EKC) (Lorente and Alvarez-Herranz, 2016). Relating the EKC hypothesis to population growth, it can be stated that population growth worsens environmental quality due to factors such as higher fossil fuel consumption, contaminated water, carbon dioxide (CO2) emissions, poor sanitation and so on. The negative consequence of a fall in environmental quality is low level of GDP per capita (Owolabi *et al*, 2022), which results when population growth does not match up with GDP growth.

LITERATURE REVIEW

Edeme and Nnadi (2018) assess the effect of the urban population growth rate on the sustainability of the environment in Nigeria. The study utilizes the Autoregressive Lag estimation technique and found that urban population growth significantly increases renewable energy consumption but causes forest reserves in Nigeria to decrease.Using a sample of 43 sub-Saharan African (SSA) economies from 1995 to 2018, and applying the dynamic panel technique and GMM technique in their study, Rakshit *et al.* (2023) discovered that a rise in the poverty gap and urbanization increases environmental degradation in SSA countries. Alnour *et al*. (2022) utilized the Morlet Wavelet Coherence technique and the SVAR technique to discover that hydropower plays an essential role in the fight against environmental pollution in Sudan.
More so, Ali et al. (2023) assessed the tripartite relationships among agricultural production, economic growth, and environmental pollution in Sub-Saharan African countries. The study utilizes a Panel research design with data ranging between 1997 and 2020. From the model of agricultural production, the result shows that economic growth increases agricultural production when the interaction term between GDP and FDI is included in the model. Amaefule *et al*. (2022) examine climate change's influence on agricultural productivity in Nigeria, with time series data ranging between 1960 and 2019. The study utilized ARDL-bound results and revealed a long-run relationship between climate change and agricultural productivity in Nigeria. This also implies that CO2 intensity and emissions negatively impact crop and food production in Nigeria in the long run;
Okogor (2022) empirically assesses the impacts of economic growth and environmental quality on human health status in Nigeria. The findings revealed a long-run relationship between health (proxied by life expectancy) and the explanatory variables included. More so, economic growth and the linear combination of access to improved water sources and access to improved sanitary facilities all significantly improve health status in Nigeria; CO2 emissions significantly reduce life expectancy in Nigeria. Ojo and Amassoma (2021) utilized the ARDL bound analysis and discovered that population growth, Agriculture, Forestry, and Fishing positively and significantly impact economic growth in Nigeria. Using primary research design in their study with 700 structured questionnaires, and descriptive and inferential statistical techniques, Ogunbode *et al*. (2023) revealed that 59.3% of both waste/noise management strategies, green economy adoption, and standard of living explain the economic effects of pollution in Iwo. The study moves further to conclude that economic factors that influence pollution in the two metropolises of Ibadan and Iwo differ, and because of this, great efforts should be made towards resolving pollution-related matters using economic indices described and used in the study.

METHODOLOGY

Model Specification

Following from the theories described above, the relationship between population growth and CO2 emissions can be captured thus:

CO2 emissions = f(POP) …………………………………………………..…………3.1

To examine the non-linear relationship in the EKC hypothesis, the Cobb-Douglas production function is applied. Aside the econometric discussions of non-linear relationships in Gujarati (2013), Asogwa and Anumudu (2022) adopt the Cobb Douglas technique in assessing the effects of renewable energy use on output growth, anchoring their study on the Solow growth model. This production function is one of the varieties commonly used to translate a non-linear relationship between one or more regressors and a regressand. The non-linear model of eqn 3.1 can be stated thus:

$Log(Y)_i = Log[\beta_1 X_{1i}^{\beta_2} X_{2i}^{\beta_3} \varepsilon^{ui}]$………………………………………………………….. 3.2

Where Y is output; X_{1i} is labour; X_{2i} is capital.

βsare parameters in the model.

Taking the natural log of both sides of eqn 3.2 in order to linearize the model, disaggregating the population variable in eqn 3.1, and introducing other control variables, eqn 3.2 can be condensed as follows:

$InCo2_t = in\beta_1 + \beta_2 InRUR_t + \beta_3 InURB_t + \beta_4 InRGDPPC_t + \beta_5 InREN_t + u_t$……………..…. 3.3

Where CO2 = Carbon emissions from gaseous fuel consumption;

RUR = Rural population Growth; URB = Urban population growth; RGDPPC = Real GDP per capita; and REN = Renewable energy consumption.

If we let $\alpha = in\beta_1$, eqn 3.3 is transformed into a log-log model such as eqn 3.4 below.

$InCo2_t = \alpha + \beta_2 InRUR_t + \beta_3 InURB_t + \beta_4 InRGDPPC_t + \beta_5 InREN_t + u_t$………………..…. 3.4

Objective One

Estimating eqn 3.4 gives the parameter estimates and the overall joint influence of the coefficients of the regressor on CO2 emissions. From objective one, we carry out some restrictions on the short-run and long-run coefficients of rural and urban population growth rates to understand how they influence the dependent variable in the short-run, such that

$\beta_i = 0$; $\beta_j = 0$ ……………………..…………………………………………….……….3.5

i for rural population parameter estimates; j for urban population parameter estimates.

The results of the above null hypotheses reveal the population growth and environmental quality nexus in a disaggregated form. In these hypotheses, we also understand which variable impacts more on the environment than the other between rural and urban population growth rates. In order to achieve this purpose, we use the ARDL Wald Test, which is discussed in the estimation techniques below.

Objective Two & Three

To understand the long-run and short-run effects of rural population growth on environmental quality in Nigeria, we estimate equation 3.4 using the ARDL technique. The ARDL model is adapted from Asogwa and Anumudu (2022).

$\Delta InY_t = \alpha + \sum^{p}_{i-1}\beta\Delta_i InY_{t-i} + \sum^{q}_{i-1}\beta_i \Delta InX_{t-i} + ECM(-1) + u_t$……………………… 3.6

Eqn 3.6 shows a mix of current and previous values of the dependent and independent variables, which defines the dynamic nature of the ARDL (p, q) model. P stands for the autoregressive nature of the regressand, while p stands for the distributive nature of the regressors included in the model. The ECM(-1) stands for the Error Correction Term which defines the short-run dynamics of the model.

Y = CO2; X = Rural population growth, urban population growth, real GDP per capita, and renewable energy consumption.

RESULTS AND DISCUSSIONS

Philip-Perron unit root test carried out in this study revealed that data for CO2 emission and renewable energy consumption are stationary at levels, 1(0), real GDP per capita is stationary at first difference, 1(1), while rural and urban population are stationary at second difference, 1(2). Stationarity at 2nd difference, more interestingly, is not a new discovery in economics. According to literature, the issue of structural break on time series data is one of the weaknesses of the commonly used Augmented Dickey Fuller and the PP tests in checking for unit root in a variable (Siddha et al, 2020). When there is structural break in the data, the ADF and the PP procedures have low power in detecting for unit roots in the data; it becomes difficult to reject the null hypothesis of non-stationarity of the variables involved while using the

two methods. The ADF and PP unit root tests assume only one unit root in a variable. According to Gujarati (2013), data integrated of order two, 1(2), implies that there is more than one unit root in data, and the commonly used ADF and PP tests are not suitable in investigating the stationarity of the data. Despite the recommendation of a Toda Yamamoto VAR analysis by Siddha et al (2020) in cases of stationary at 2nd difference, there is high possibility of structural breaks on the rural and urban population data used in this study, which could be solved using a stronger stationarity test other than the ADF and the Philip-Perron (PP) tests. This investigation is outside the scope of this study.

The unit root test result did not show whether or not long-run equilibrium relationships exist in the equation system, which necessitated carrying out a con-integration test. Before carrying the co-integration test, we determined the maximum lag length for our model using the Akaike Information Criteria (AIC). A maximum lag length of two is better for time series data, as recommended by Pesaran et al (2001). The Akaike Information Criteria (AIC) is mostly used in determining the lag length. Determining the lag length in small sample size, the Schwarz Bayesian Information Criterion (SBIC) is superior (Lutkepohl, 2005); the smaller the lag length, the better the model results.In this study, the AICimplied that a lag length of 6 is optimal. This is supported by Hannan-Quinn and FPE criteria. As a result, the study's maximum lag length is 6. This study employed a lag length of 2 in estimating the ARDL models.

From the co-integration result, the F-statistic (8.4895) is greater than the lower and upper bounds at both 1%, 5%, and 10% levels of significance. This is a strong statistical/econometric evidence for a co-integrating equation system. We concluded that, using each of the variables as a dependent variable and the rest as independent variables, the equations formed depict a long-run equilibrium relationship in the system. From here, we estimated both the long-run and the short-run ECM forms of the ARDL Model as showed below.

Short-run and Long-run Results

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LRUR	-0.478158	0.794302	-0.601986	0.5526
LURB	2.772864	0.652907	4.246949	0.0003
LRGDPPC	-0.848564	0.226475	-3.746839	0.0009
LREN	2.569642	1.287988	1.995082	0.0570
Short-run ECM Regression result				
D(LURB)	19.76821	7.764955	2.545824	0.0174
D(LURB(-1))	-1.555448	10.51374	-0.147944	0.8836
D(LURB(-2))	20.77516	8.153693	2.547945	0.0174
D(LRGDPPC)	-2.216331	0.507064	-4.370910	0.0002
D(LRGDPPC(-1))	0.942865	0.568394	1.658821	0.1096
D(LRGDPPC(-2))	1.524223	0.519046	2.936587	0.0070
D(LRGDPPC(-3))	1.119409	0.498613	2.245046	0.0339
CointEq(-1)	-1.341158	0.171543	-7.818218	0.0000
R-squared	0.777448	Mean dependent var		0.021015
Adjusted R-squared	0.725519	S.D. dependent var		0.079628
S.E. of regression	0.041718	Akaike info criterion		-3.331112
Sum squared resid	0.052211	Schwarz criterion		-2.986357
Log likelihood	71.29114	Hannan-Quinn criter.		-3.208451
		Durbin-Watson stat		2.213894

Table 1.*Source: Author's Computation using E-Views 12*

Rural Population: The coefficient of rural population (-0.4781) shows that rural population has a negative relationship with CO2 emissions in the long-run, which means that the higher the growth of rural population, the lower the rate of emissions. This result does not conform to a priori, as we expected a positive relationship between the two variable. More importantly, this coefficient is statistically insignificant (p-value=0.5526), implying that rural population growth does not have a long-run statistical impact on CO2 emissions.The first impression from the ECM result is that rural population does not have

a short-run impact on CO_2 emissions in Nigeria, which also implies that rural population growth is not a significant factor in determining the level of emissions in Nigeria, in both short-run and long-run periods. Also, renewable energy consumption does not have a short-run impact on emission level, as confirmed on the ECM result. Consumption of green energy in Nigeria is insignificant in determining emission levels in both the short-run and long-run.

Urban Population: The coefficient of urban population (2.7728) shows that urban population has a positive relationship with CO_2 emission in the long-run, which also means that if population of people in urban centres rises by 1%, CO_2 emission levels in Nigeria will more than double (2.77%) in the long-run. This estimated coefficient is statistically significant at 5% level, meaning that urban population growth has a long-run statistical impact on CO_2 emission level in Nigeria, and this relationship conforms to a priori expectation. The coefficients of urban population reveal that the growth of urban population in the previous year causes emission levels to drop by 1.56% in the current year; in the previous two years, growth of urban population causes emission level to rise by 20.78% in the current year. It is still being expected that population growth in many past years would cause emissions to rise because of the non-popularity of the alternative sources of energy many years back. Recent changes in urban population is expected to have a negative effect of CO_2 emissions due to massive awareness of green energy technologies, despite their scarce use in Nigeria due to the developing nature of the society

On the ECM, the coefficients of urban population reveal that the growth of urban population in the previous year causes emission levels to drop by 1.56% in the current year; in the previous two years, growth of urban population causes emission level to rise by 20.78% in the current year. It is still being expected that population growth in many past years would cause emissions to rise because of the non-popularity of the alternative sources of energy many years back. Recent changes in urban population is expected to have a negative effect of CO_2 emissions due to massive awareness of green energy technologies, despite their scarce use in Nigeria due to the developing nature of the society.

Real GDP per capita: The Coefficient of economic improvement in Nigeria (-0.8485) shows that real GDP per capita has a negative relationship with CO_2 emissions in the long-run, and this relationship is statistically significant at 5% level. If GDP per capita increases by 1% in the long-run, emission level will drop by 0.85%. Based on A priori, the relationship between CO_2 emissions and real GDP per capita conforms to what is expected from the EKC hypothesis which states that, initially, growth of economic activities causes the CO_2 level to increase up to a certain point, when it starts dropping as per capita income of people and technology switching keep rising. Hence, for us to have the inverted U shape of the EKC, this relationship is expected to be positive in the short-run. Real GDP per capita in the previous times, however, conform to a priori expectation. In the short-run, growth of economic activities in Nigeria leads to growth of emission level in both the first, second, and third-year lags (0.94%, 1.52% and 1.12%); the short-run and long-run results confirm the application of the EKC hypothesis for Nigeria, using available.

Wald Test Result

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	1.941904	(3, 25)	0.1487
Chi-square	5.825712	3	0.1204

Null Hypothesis: C(1)=C(2)=C(3)=0

Table 2. *Source: E-Views Result*

A restriction was placed on the short-run coefficient of the urban population. The table 2 above shows that the three coefficients of urban population are jointly insignificant, which implies that, in the short-run, urban population growth in the previous periods does not have a joint significant impact on emission levels in Nigeria. The probability value of the F-statistic is greater than 0.05 level of significance.

CONCLUSIONS

Among the basic findings in this study, the following conclusions were reached:

1. Rural population has a negative effect on CO_2 emission in the long-run and this relationship is insignificant. Migration is one of the factors that bring about this negative effect; from rural areas,

Nigerians migrate to cities where they utilise more fossil energy sources, thereby emitting more carbon into the atmosphere. In investigating the effects of rural population growth on environmental quality, such factors need to considered such as, ecological footprint, forest cultivation, and other harmful emissions into the atmosphere.

2. The positive significant effect of urban population growth on CO2 emission level in Nigeria is more than double. A 2.78% growth of emission levels caused by urban growth implies that urbanisation is a huge factor that increases carbon emission level in Nigeria and possibly in other developing nations who depend so much on fossil energy resources for survival.

3. The ECM result has shown that urban population in the previous year improves environmental quality due to the negative relationship with CO2 emission level; the previous two to three years cause environmental quality to fall due to their positive relationship with emission levels.

4. The ARDL resultsalso showed the existence of the EKC in Nigeria. First, the short-run result revealed that the growth of real GDP per capita within the three years lag all have positive relationships with emission level, which implies a reduction environmental quality in the short-run. In the long-run, the relationship between real GDP per capital and CO2 emission turns downward (-0.8485), showing a negative relationship, which also implies that environmental quality improves as economic activities continue to grow in the future.

5. There is a long-run positive relationship (2.57%) between renewable energy consumption and CO2 emissions in Nigeria. Explaining further, Nigeria has the potential to improve environmental quality through massive local investment and consumption, adoption of government policies on renewable energy technologies, population control, and other measures that increase awareness for energy mix transition.

6. The long-run result has shown that urban population has a significant impact on CO2 emission; rural population does not. In the short-run, rural population has no significant impact on emission levels, while urban population at different stages has a no joint significant effect on emission levels in Nigeria. Hence, we conclude that urban population growth has more significant effect on CO2 emissions than rural population growth in Nigeria. According to Shaari *et al.* (2021), C02 emissions are less prevalent in rural areas than in urban centres. This conclusion is expected due to the fact that CO2 emissions are more popular in urban centres than rural centres. This does not imply that environmental quality is better protected in rural areas than urban. Just as observed in cities, a great number of Nigerians in the rural areas are still using traditional sources of cooking, occupying agricultural lands, cutting down trees and making charcoals for cooking. Sources of biomass energy in small settlements and villages are charcoal, fuelwood, and agro-wastes such as palm Kernel shell, palm fruit fiber.

Policy Implications

The main objective of this study is to examine the relationship between population growth and environmental quality in Nigeria, disaggregating population into rural and urban growth. It was found that rural population has a negative effect on CO2 emission in the long-run and this relationship is insignificant. The implication of this relationship could be viewed from the angle of rural-urban migration. Migration to cities is very popular in the world, and this could also be a good reason why urban population growth has more significant effect on emission levels. The negative impact of rural population implies that rural population growth brings about reduction in CO2 emissions, which is an improvement in environmental quality. Migration is one of the factors that bring about this result, as people migrate to cities where they utilise fossil energy, thereby emitting more carbon into the atmosphere. This result does not mean that rural population has no effect on other variables attributed to rural areas, which are commonly used to define environmental quality; such variables include, ecological footprint, forest cultivation, and other harmful emissions into the atmosphere.

The statistical significance of urban population growth has a double effect on environmental quality in Nigeria. This is because, according to literature, urban population growth is known to have more effect on environmental quality. A 2.78% growth of emission levels caused by urban growth implies that urbanisation is a huge factor that increases carbon emission level in Nigeria and possibly in other developing nations who depend so much on fossil energy resources for survival. This is in line with the findings from Asogwa and Anumudu (2022). Poor adoption of renewable energy policies is one of the reasons why urban growth causes the environment to depreciate in quality. The realities of poor waste disposal and management in both urban and rural areas, as well as local production technology, indicate a poor situation of a people and non-implementation of environmental policies in a country (Adejumo, 2020). This is the case in Nigerian cities and local areas. The ECM result has shown that urban population in the previous year improves environmental quality due to the negative relationship with CO2 emission

level; the previous years cause environmental quality to fall, and this is expected because the concept of renewable energy was not so popular in the past years than what is obtainable in recent times. The short-run result also implies that continuous adoption of alternative sources of energy would continue to improve environmental quality, especially in urban centres where energy is massively in use for economic growth and technological advancement.

Environmental Kuznets Hypothesis is one of the theories used to back up the model for this study. According to the theory, environmental quality is related to GDP per capita in the form of an inverted-U, such that the higher the growth of economic activities in a country, the higher the GDP per capita, the lower the amount of poor people in the country in terms of their per capita income (Owolabi et al, 2019). Initially, economic growth worsens environmental quality as growth requires more resources to produce and consume goods and services, which results in more pollution and waste; Kuznets refers to this as a scale effect. As the economy advances in time, it brings a structural change from energy intensive-based activities to less pollutant technology-based activities, replacing the old with green technologies. This new process consequently improves environmental quality, creating an inverted U-shaped relationship between pollution and economic growth (Ulucak and Bilgili, 2018). The ECM result also showed that the EKC exists in Nigeria. First, the short-run result revealed that the growth of real GDP per capita within the three years lag all have positive relationships with emission level, which implies a reduction environmental quality in the short-run. In the long-run, the relationship between real GDP per capital and CO2 emission turns downward (-0.8485), showing a negative relationship, which also implies that environmental quality improves as economic activities continue to rise in the future. And Nigeria has the potential to tap from renewable energy sources by investing in the right technologies for massive growth and socio-cultural advancements.

Generally speaking, population growth in Nigeria seems uncontrollable. Nigeria has the potential to improve environmental quality through massive investment and local consumption, population control and other measures that would increase awareness for energy mix transition. This argument is supported by the long-run positive relationship (2.57%) between renewable energy consumption and CO2 emissions in Nigeria. This positive relationship implies that, until Nigerians begin to adopt renewable energy policies, these alternative sources of energy may not solve the emission problem in Nigeria. Supporting this claim, renewable energy consumption has no short-run effect on emission in Nigeria, which reveals that the adoption of renewable energy sources only have a long-run positive effect on environmental quality if energy policies are fully adopted, especially in the process of tapping from local endowments, which are cheaper than the imported technologies.

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IMPACT OF PMS PRICES AND PMS SUBSIDY REMOVAL ON CONSUMER GOODS IN NIGERIA: EVIDENCE FROM ARDL/ECM MODEL

Ukpai K. Ukpai
Department of Marketing, Michael Okpara University of Agriculture Umudike.

ABSTRACT
Motivated by the current price distortions caused by petrol subsidy removal, this study investigates the dynamic relationships between premium motor spirit (PMS) prices and consumer goods prices (headline inflation and food inflation) in Nigeria using the ARDL/ECM framework. Our empirical model incorporates stock prices (All-share index), prime lending rate, and end-period exchange rate as control factors. The empirical analysis is based on monthly data from 1996M01 to 2023M09. We find that PMS price is negatively related to headline inflation and positively related to food inflation. More specifically, our analysis shows that a percentage increase in PMS price is immediately followed by a 0.004% decrease in headline inflation and an approximately 0.04% increase in food inflation. Further, it is found that PMS price has a long, stable relationship with consumer goods prices, with a speed of adjustment of about 0.13% and 0.11% for food inflation and headline inflation, respectively. Therefore, subsidy removal has the potential to trigger unanticipated food inflation unless prudent measures to curb its effects are immediately implemented.
Keywords: PMS price, headline inflation, food inflation, ARDL

INTRODUCTION
The Nigerian oil sector has continued to be the mainstay of the Nigerian economy. The sector, which has three subsectors, namely, upstream, downstream, and services, remains the country's most significant foreign exchange earner and has witnessed impressive growth since it became functional in 1958. Available NBS data show that crude oil export stood at ₦ 5,586.29 billion in Q2 2023, which is approximately 80% of the total export of ₦ 7,015.71 billion for that quarter. Revenue generated from the oil and gas sector has been invested in social infrastructure and several industrial projects such as petrochemical plants, fertilizer plants, steel complexes, and the aluminum smelter plant (Ojo & Adebusuyi, 1996).
Over the years, the Nigerian petroleum industry has endured government regulation and control. However, the regulation of the oil and gas sector, which started in 1973, has led to frequent adjustments of fuel pump prices, which has been described as a complex socio-economic problem with devastating consequences on the Nigerian economy (Akpeti *et al.,* 2022; Sakanko *et al.,* 2021). Table 1 shows the PMS price adjustments by successive administrations in Nigeria.
On 29th May 2023, President Bola Tinubu announced the new subsidy regime in Nigeria. However, there are mixed views regarding the effect of subsidy removal on consumer goods prices and the larger economy. The Federal Government has explained that the current subsidy removal would be beneficial to the Nigerian economy in the long run as it would significantly increase oil and gas production and reserves, boost national revenue, remove market distortions, and enhance the global competitiveness of the oil and gas industry towards inclusive and sustainable national economic growth. It is also argued that subsidy removal would free up the public funds needed for more massive and tangible infrastructural investments in strategic areas such as education, housing, hospitals, and electricity. On the contrary, several critics have argued that subsidy removal will worsen the current high inflation and make prices of goods and services unaffordable to the poor and lower-income groups, devastatingly affecting the national economy. Thus, this study is strategic and timely as it relies on up-to-date data to provide empirical insight into the direction and the extent of the effects of fuel pump prices and PMS subsidy removal on different inflation measures.
Several empirical studies have attempted to investigate the effect of petroleum product prices on consumer goods prices in Nigeria. However, the findings reported by these studies are conflicting. Some scholars find that an increase in PMS price increase is associated with an increase in consumer goods prices (Eregha *et al.,* 2015; Kanu *et al.,* 2019; Okwanya *et al.,* 2015; Wale-Awe & Sulaiman, 2020); others reported a negative relationship between PMS prices and consumer goods prices (Akpaeti *et al.*, 2022). Also, there are other studies, for example, Gidigbi and Bello (2020)) whose findings lead to the conclusion that maintaining PMS subsidy is a better policy option for poverty removal than subsidy removal

Table 1: PMS Price Adjustments in Nigeria

Administration	Year	From	To
Yakubu Gowon	1973	6k	8.45k
Murtala Mohammed	1976	8.45k	9k
Olusegun Obasanjo	01/10/1978	9k`	15.37k
Shehu Shagari	20/04/1982	15.37k	20k
Ibrahim Babangida	31/03/1986	20k	39.5k
Ibrahim Babangida	10/04/1988	39.37k	42k
Ibrahim Babangida	19/12/1989	42k	60k
Ibrahim Babangida	06/03/1991	60k	70k
Ernest Shonekan	08/11/1993	70k`	₦5
Sani Abacha	22/11/1993	₦5	₦3.50k
Sani Abacha	02/10/1994	₦3.50k	₦15
Sani Abacha	04/10/1994	₦15	₦11
Abdulsalami Abubakar	20/12/1998	₦11	₦25
Abdulsalami Abubakar	06/01/1999	₦25	₦20
Olusegun Obasanjo	01/06/2000	₦20	₦30
Olusegun Obasanjo	08/06/2000	₦30	₦22
Olusegun Obasanjo	01/01/2002	₦22	₦26
Olusegun Obasanjo	06/06/2003	₦26	₦40
Olusegun Obasanjo	01/10/2003	₦40	₦34
Olusegun Obasanjo	29/05/2004	₦34	₦50
Olusegun Obasanjo	05/08/2005	₦50	₦65
Olusegun Obasanjo	29/05/2007	₦65	₦70
Umoru Musa Yar'adua	2007	₦75	₦65
Goodluck Jonathan	01/01/2012	₦65	₦141
Goodluck Jonathan	February 2012	₦141	₦97
Goodluck Jonathan	February 2015	₦97	₦87
Mohammed Buhari	May 2015	₦87	₦145
Mohammed Buhari		₦145k	₦350

Source: Eregha et al. (2015) with little modifications

This study investigates the impact of PMS prices and PMS subsidy removal on both food inflation and headline inflation in Nigeria using the ARDL/ECM framework. It also considers the impact of exchange rate, stock prices, and interest on inflation measures using monthly data from 1996M01 to 2023M09. The primary study objectives are to determine the extent of the impact of fuel pump prices on consumer goods prices and the extent to which fuel study removal affects consumer goods prices in Nigeria.

This study is significant in two main ways. First, to our knowledge, it is the first to use monthly data to investigate the dynamic relationship between petroleum product prices and consumer goods prices in Nigeria. Much of the previous studies on this topic use yearly data, while the few remaining studies are based on quarterly data. Hence, this study, which seeks to provide up-to-date evidence on the dynamic relationship between fuel pump prices and consumer goods prices, enjoys the advantage of more data points needed for a robust, dependable empirical analysis. Secondly, this study considers food and headline inflation, which is novel in the Nigerian context, as previous studies consider only headline inflation or All-items consumer price index.

LITERATURE REVIEW

Theoretical Background

In theory, consumer goods prices are affected by either demand or supply shocks. Demand shocks occur when aggregate demand continuously rises above aggregate supply due to changes in consumption, investment, and government expenditure. In contrast, supply shocks occur mainly when there is a depreciation in the exchange rate or when there is a significant increase in production costs, wages, and salaries (Asogu, 1991; Totonchi, 2011). Our framework links the current high and rising inflation in Nigeria to both demand and supply factors since subsidy removal leads to an adjustment in government spending, while a fuel pump price increase leads to an increase in production costs.

Review of Recent Empirical Studies in Nigeria

Eregha *et al*. (2015) employ the OLS and ECM frameworks to analyze the impact of petroleum product prices on inflation in Nigeria using quarterly data from 1994Q1 to 2012Q4. Based on a model that controls for money supply, fiscal deficit, and exchange rate, they find, among other things, that prices of PMS, AGO, and DPK all have a positive long-run relationship with inflation. However, the long-run effects of AGO and DPK prices are not statistically significant.

Okwanya et al. (2015) investigated the impact of fuel subsidy removal on the consumer price index in Nigeria using the ECM framework. They use yearly time series data covering from 1986 to 2014 and find that a percentage increase in PMS price would cause about 0.78% increase in CPI. They also find that although PMS price and CPI have a stable long-run relationship, the deviations along this long-run equilibrium are correlated at a deficient speed.

Kanu *et al*. (2019) employed the OLS and VAR frameworks to analyze Nigeria's causal and long-term interactions between petroleum and consumer product prices from 1996 to 2018. They find that prices of petroleum products such as PMS, DPK, and AGO cointegrate with consumer product prices. Also, results from the OLS regression show that all three petroleum product prices have a positive and highly significant relationship with consumer product prices. However, the results from the Granger causality tests fail to establish causality from petroleum product prices to consumer goods prices.

Gidigbi and Bello (2020) use the VAR framework to explore the effect of subsidy removal on the poverty rate in Nigeria using annual time series data covering the period 1981-2016. Their empirical analysis concludes that maintaining a PMS subsidy is a better policy option for poverty removal than subsidy removal.

Wale-Awe and Sulaiman (2020) explore the impact of petroleum product pricing on inflationary trends in Nigeria using the ADRL framework. Prices of three petroleum products (PMS, AGO, and DPK) are considered, while exchange rate is incorporated as a control variable. Using yearly time series data from 1980 to 2018, they find that PMS price has a positive long-run effect on the inflation rate, while DPK price and AGO price both negatively impact the inflation rate. However, the relationship between DPK price and the inflation rate is not statistically significant.

Sakanko et al. (2021) use the nonlinear ARDL framework to investigate the long-run dependence of the consumer price index on petroleum pump prices in Nigeria. Using yearly time series data from 1980 to 2020, they find that the dynamic relationship between petroleum pump prices and consumer goods prices has an asymmetric effect and extends into the long run.

Iwuoha et al. (2021) analyze the dynamic impact of fuel pump price changes on economic growth in Nigeria using the VECM and Granger causality tests. Using historical data from 1980 to 2019, they find that in the short run, gross domestic product is positively but not significantly related to PMS and DPK prices, while it is negatively and significantly related to AGO prices. Also, the Granger causality test results establish a causal flow from the prices of the three petroleum products to economic growth.

Akpaeti et al. (2022) employ the vector error correction model (VECM) to investigate the dynamic interaction between fuel price changes and consumer prices in Nigeria. Using yearly historical data from 1970 to 2016, they find that fuel pump prices change negatively and significantly affect consumer goods prices and several other macroeconomic variables such as food import, exchange rate, foreign private investment, and government fund allocation to agriculture. Their findings also indicate that the negative effect of fuel pump price increase on these variables has both short-run and long-run dimensions.

METHODOLOGY

Data Description

This study uses monthly up-to-date data from 1996M01 to 2023M09 to investigate the impact of fuel pump prices and PMS subsidy removal on consumer goods in Nigeria. The data are sourced from the CBN database and statistical bulletins and are analyzed in EViews. A dummy variable is used to measure PMS subsidy removal, which takes the value of 1 for the pre-subsidy removal period (1996M01 – 2023M04) or zero for the post-subsidy removal period (2023M05 – 2023M09). Table 2 describes the rest of the variables, while Table 3 and Figure 1 show their descriptive statistics and time series graphs, respectively.

From Table 3, food and headline inflation averaged 12.86% and 13.14% over the sampled period; the average fuel pump price is ₦83.02. The mean values of inflation, exchange change, and All share index are 17.5%, ₦187.99, and 26,220.71pts. Fuel pump price reached a maximum of ₦626.7, while food inflation and headline inflation values are 39.53% and 47.56%, respectively. The maximum values of the exchange

rate, prime lending rate, and All-share index are ₦462.01, 26.38%, and 65,652.38pts. Further, as indicated by the JB statistic, while none of the series has a normal distribution, most have a positively skewed leptokurtic distribution.

Table 2: Variables Description

Variable	Role	Measure	Identifier
Headline inflation	Dependent	% Year-on-year change in All items consumer price index (CPI)	HINF
Food inflation	Dependent	% Year-on-year change in food CPI	FINF
PMS price	Explanatory	Fuel pump price	FPP
Stock price	Control	All share index	ASI
Interest rate	Control	Prime lending rate	PLR
Exchange rate	Control	End-period exchange rate	EPEXR

Table 3: Descriptive Statistics

Statistic	FINF	HINF	FPP	ASI	PLR	EPEXR
Mean	12.86	13.14	83.02	26220.71	17.50	187.99
Maximum	39.53	47.56	626.70	65652.38	26.38	462.01
Minimum	-17.50	-2.49	11.00	4890.80	11.13	75.30
Std. Dev.	9.20	6.36	81.52	14488.65	3.07	105.13
Skewness	-0.30	1.28	3.29	0.32	0.33	1.16
Kurtosis	4.82	7.70	20.63	2.43	3.70	3.07
Jarque-Bera	50.95	397.26	4912.75	10.23	12.93	73.96
Probability	0.0000	0.0000	0.0000	0.0060	0.0016	0.0000

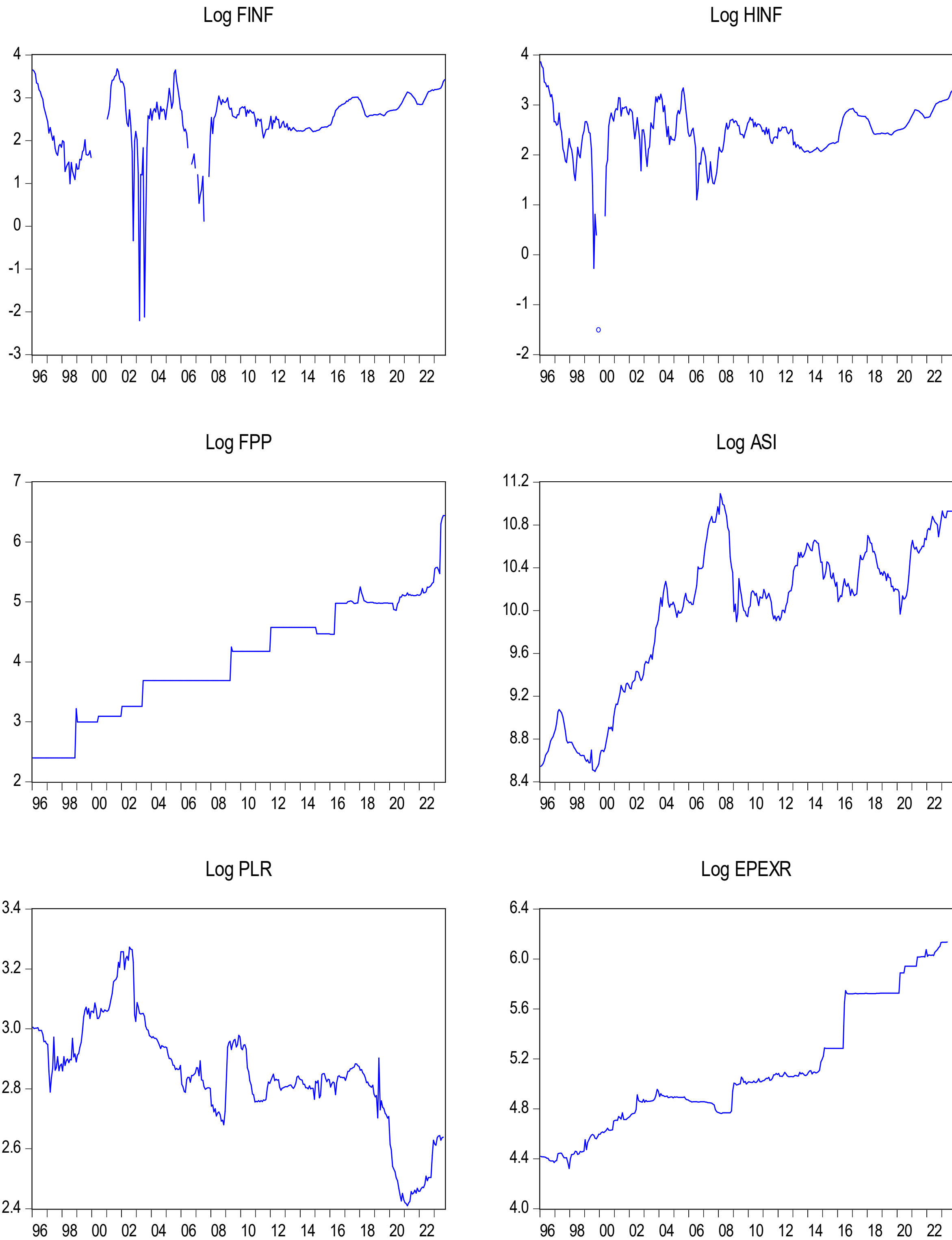

Figure 1: Time series graph for HINF, FINF, FPP, ASI, PLR, and EPEXR

Empirical Framework

We use the ARDL/ECM framework to analyze the structural dependence of consumer goods prices on PMS prices. Compared to other time series frameworks, the ARDL/ECM method is attractive because of its strength in analyzing dynamic relationships among economic and financial variables irrespective of their order of integration. We specify a simple ARDL/ECM model for food inflation and headline inflation, in logarithmic form, incorporating exchange rate, All-share index, prime lending rate, and subsidy dummy as follows:

$$LFINF_t = \alpha_0 + \alpha_1 LFINF_{t-1} + \alpha_2 LFPP_t + \alpha_3 LEPEXR_t + \alpha_4 LASI_t + \alpha_5 LPLR_t + \alpha_6 SUBSIDY + \varepsilon_t \quad (1)$$

$$LHINF_t = \beta_0 + \beta_1 LHINF_{t-1} + \beta_2 LFPP_t + \beta_3 LEPEXR_t + \beta_4 LASI_t + \beta_5 LPLR_t + \beta_6 SUBSIDY + \epsilon_t \quad (2)$$

Where *L* represents the logarithm, and α_1 and β_1 capture the persistence in food and headline inflation, respectively.

RESULTS AND DISCUSSION

Fuel Pump Price and Food Inflation

Table 4 reports the ARDL results for the estimated food inflation model. The Schwarz information criterion, used to determine the model order, selects an ARDL(4,0,0,0) model. This shows that a dynamic model incorporating 4 lags of the dependent variable as additional explanatory factors is the most plausible specification for the impact of fuel pump prices on food inflation in Nigeria. The model estimation is based on HAC standard errors, which are robust to serial correlation and heteroskedasticity. Hence, model specification errors have been controlled.

Table 4: ARDL Results for LFINF Model

Variable	Coefficient	P-value
LFINF(-1)	0.5307	0.0000
LFINF(-2)	0.0546	0.4815
LFINF(-3)	-0.1426	0.0431
LFINF(-4)	0.4280	0.0232
LFPP	0.0437	0.7303
LEPEXR	-0.0206	0.9168
LASI	0.0511	0.6208
LPLR	-0.1147	0.7123
SUBSIDY	0.0034	0.8244
Constant	0.0214	0.9795
ECM	-0.1291	0.0001
R-squared	0.6863	
Adjusted R-squared	0.6762	
F-statistic	68.316	0.0000
Durbin-Watson	2.0021	

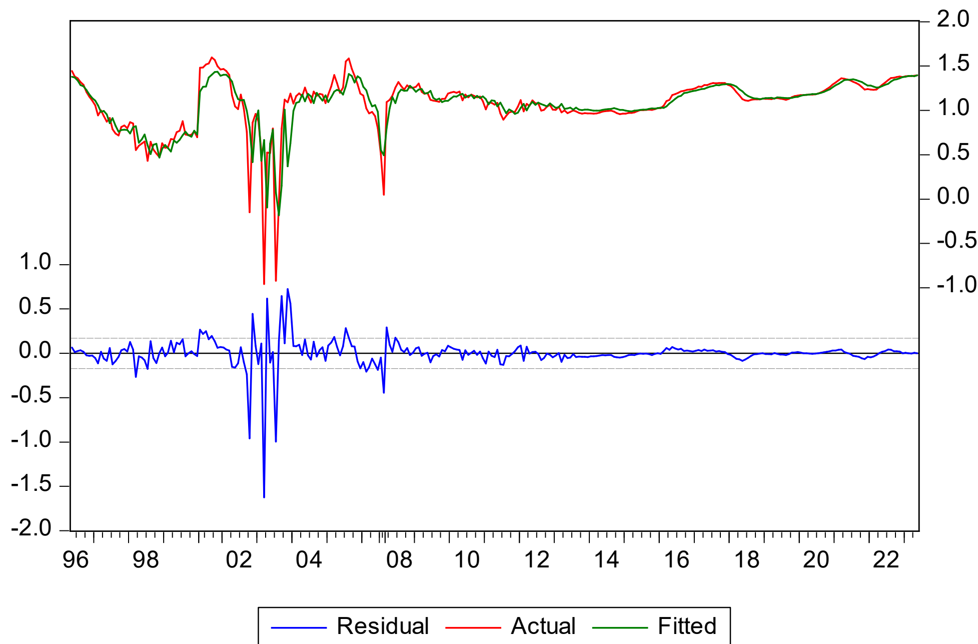

Figure 2: Residual Plot for LFINF Model

From the lower panel of Table 4, the adjusted R-squared indicates that the food inflation model is well-fitted, with about 66% of the model variance explained by the right-hand side variables. Also, the F-statistic is statistically significant, while the Durbin-Watson statistic has an approximate ideal value of 2. The residual plot in Figure 2 shows that the fitted and actual lines are very close to each other, while the estimated errors are stationary. All these show that the fitted food inflation model satisfies the statistical requirements for dependable empirical results.

From the upper panel, the coefficients of LFINF(-1) and LFINF(-4) are statistically significant, while the coefficients of LFINF(-2) and LFINF(-3) are not statistically significant. The coefficients of 0.5307, 0.0546, -0.1426, and 0.4280 show that a percentage increase in the current food inflation would produce a net positive effect of 0.87% after four months, which is substantial and highly significant in an economic sense. Hence, food inflation is highly persistent and predictable based on historical performance. Also, as expected, the error correction coefficient (ECM) is negative and highly significant, showing that the fitted food inflation model is stable and has long-run implications. The coefficient of -0.1291 shows that while food inflation would adjust to equilibrium after suffering a significant shock, only approximately 13% of this adjustment would occur in the next period. Hence, food inflation has a low speed of adjustment and takes around 8 months at 13% per month to fully recover from an unanticipated shock.

The coefficient on LFPP is positively signed but not statistically significant. The estimated coefficient of 0.0437 indicates that a percentage increase in fuel pump price is associated with a 0.04% increase in food inflation. Hence, while the increase in fuel pump price can trigger food inflation, the empirical link between the two variables is weak and insignificant both statistically and economically. Also, the estimated subsidy dummy is positive but not statistically significant. However, while this result has underscored the tendency for fuel subsidy removal to trigger food inflation in Nigeria, its lack of significance may be temporary. It should be interpreted with caution since it has not been quite a long since the new subsidy regime was announced.

Exchange rates, stock prices, and prime lending rates do not significantly affect food inflation. However, the coefficients of -0.0206, 0.0511, and -0.1147 indicate that food inflation is negatively related to both the end-period exchange and prime lending rates. In contrast, it is positively related to stock prices. These results suggest that the current rising food inflation can be curbed by raising the prime lending rate, stabilizing the exchange rate, and improving stock market activities. Hence, policy interventions can flow in these directions.

Fuel Pump Price and Headline Inflation

Table 5 reports the ARDL results for the estimated headline inflation model. The Schwarz information criterion, used to determine the model order, selects an ARDL(1,0,0,0) model. This shows that a dynamic model incorporating 1 lagged value of the dependent variable as an additional explanatory factor is the most plausible specification for the impact of fuel pump prices on headline inflation in Nigeria. The model estimation is based on HAC standard errors, which are robust to serial correlation and heteroskedasticity. Hence, model specification errors have been controlled.

Table 5: ARDL Results for LFINF Model

Variable	Coefficient	P-value
LHINF(-1)	0.8866	0.0000
LFPP	-0.004	0.9101
LEPEXR	0.0547	0.2525
LASI	-0.0120	0.8368
LPLR	-0.0378	0.6137
SUBSIDY	0.0159	0.2646
Constant	0.1064	0.7015
ECM	-0.1133	0.0001
R-squared	0.8146	
Adjusted R-squared	0.8110	
F-statistic	229.95	0.0000
Durbin-Watson	1.8015	

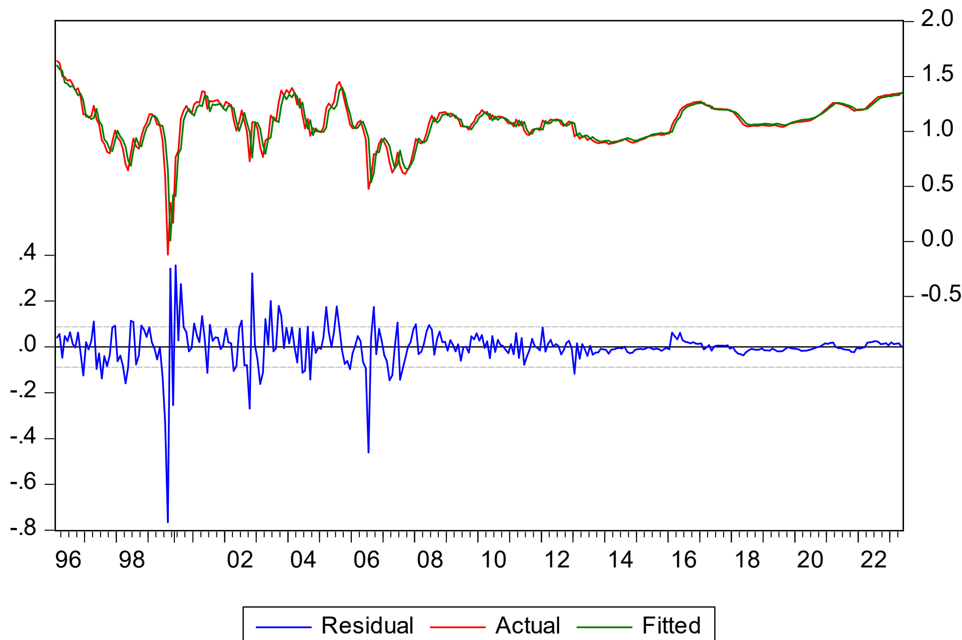

Figure 3: Residual Plot for LFINF Model

From the lower panel of Table 5, the adjusted R-squared indicates that the headline inflation model is well-fitted, with about 81% of the model variance explained by the right-hand side variables. Also, the F-statistic is statistically significant, while the Durbin-Watson statistic is close to its ideal value of 2. The residual plot in Figure 3 shows that the fitted and actual lines are very close to each other, while the

estimated errors are stationary. Hence, like the food inflation model, it is clear that the fitted headline inflation model satisfies the statistical requirements for dependable empirical results.

From the upper panel, the coefficient on LHINF(-1) is positive and highly statistically significant. The coefficient of 0.8866 shows that a percentage increase in the current headline inflation would produce a positive effect of about approximately 0.89% in the next period, which is substantial and highly significant in an economic sense. Hence, like food inflation, headline inflation is highly persistent and predictable based on its immediate history. Also, as expected, the error correction coefficient (ECM) is negative and highly significant, showing that the fitted headline inflation model is stable and has long-run implications. The coefficient of -0.1133 shows that while headline inflation would adjust to equilibrium after suffering a significant shock, only approximately 11% of this adjustment would occur in the next period. Hence, headline inflation has a low speed of adjustment.

The coefficient on LFPP is negatively signed but not statistically significant. The estimated coefficient of -0.004 indicates that a percentage increase in fuel pump price is associated with a 0.004% decrease in food inflation. Hence, there is almost a zero relationship between fuel pump prices and rising inflation. Also, the estimated subsidy dummy is not statistically significant. However, while the lack of significance of the subsidy dummy should be interpreted with caution since it is not quite long since the new fiscal regime was introduced, its positive sign is consistent with the popular view that subsidy removal is responsible for the high and rising headline inflation as currently being experienced in Nigeria.

Exchange rates, stock prices, and prime lending rates all have no significant effect on food inflation. However, the coefficients of -0.0206, 0.0511, and -0.1147 indicate that food inflation is negatively related to both the end-period exchange and prime lending rates. In contrast, it is positively related to stock prices. These results suggest that the current rising food inflation can be curbed by raising the prime lending rate, stabilizing the exchange rate, and improving stock market activities. Hence, policy interventions can flow in these directions.

CONCLUSION AND POLICY IMPLICATION

This study employs the ARDL framework to investigate the impact of the PMS prices and the recent PMS subsidy removal on inflation rates in Nigeria. While we consider two dimensions of inflation, namely, food inflation and headline inflation, our empirical model incorporates exchange rate, stock prices, and interest rate as control variables. Our empirical analysis is based on up-to-date monthly data from 1996M01 to 2023M09. The conclusions are as follows:

Evidence shows that fuel pump prices are not significantly related to food and headline inflation. However, fuel pump price is positively associated with food inflation; it is negatively associated with headline inflation. Also, while we do not find evidence of a statistically significant relationship between PMS price subsidy removal and inflation rates, our results reveal the tendency for the new policy to increase both food and headline inflation rates. However, these results should be interpreted cautiously since it is not quite long after the new fiscal regime was introduced. Therefore, we conclude that the new subsidy removal has the potential to trigger unanticipated food inflation unless prudent measures to mitigate its effects are immediately implemented.

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MACROS ECONOMICS VARIABLES AND FOREIGN DIRECT INVESTMENT INFLOWS IN NIGERIA

[1] Onyike, Sixtus C., [2]Ekeagwu, Innocent C., [3]Osuala, Kenneth I. and [1]Erinmuo, Chiamaka E.

[1]Department of Banking and Finance, [2]Department of Economics, [3]Department of Business Administration
Michael Okpara University of Agriculture, Umudike
Corresponding author: onyike.sixtus@mouau.edu.ng

ABSTRACT

The paper x-rayed the impact of macroeconomic variables on the foreign direct investment inflows into Nigeria. The ex-post facto research design was adopted, and aggregate Secondary, annual time series data sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank statistical database for 1984-2021 were utilized. The data collected were analyzedusing the Ordinary Least Squares estimation technique of multiple regression analysis, the Autoregressive Distributed Lag (ARDL) approach to the co-integration test and the Vector error correction model. Findings indicated that a long-run and short-run relationship exists between macroeconomic variables and FDI. Also, the exchange and interest rates negatively and significantly impacted FDI inflows into Nigeria. In contrast, GDP and inflation rate negatively impacted FDI inflows into Nigeria, but the impact was insignificant. On the other hand, external reserves positively and significantly impacted FDI inflows into Nigeria. The study, among other things, recommends that themonetary authorities maintain a single exchange rate for the economy to reduce the activities of the currency manipulators. Also, the government should reduce corruption-laden expenditures, such as subsidy regimes, to improve the level of our external reserves that will help support our currency. Policies such as tax holidays and genuine diversification of the economy should be rigorously pursued. Furthermore, a moderate contractionary monetary policy should be pursued. Finally, the government should improve the infrastructure, such as adequate power supply, to reduce operating costs and interest bank charges.

Keywords: Foreign direct investment, macroeconomic variables, ARDL co-integration, external reserve, and Nigeria.

INTRODUCTION

Among the primary objectives of any Government is to ensure the proper functioning of the economy and the well-being of its citizens through full employment, economic growth, price stability and a favourable balance of payment. These can be achieved through the process of industrialization. To ensure this, economies, especially developing economies, have adopted external development finance, in which foreign direct investment is primary and can greatly enhance the government's industrialization process and development goals by helping to finance investment (Ojiaku & Odionye, 2020). The last three decades have witnessed an astronomical development ineconomic globalization and its attendant effect of increased capital mobilization (Sikler & Sikler, 2022), and FDI has been at the forefront of global capital mobility. The importance of FDI can never be overemphasized; this ranges from serving as an important catalyst that lubricates the engine of economic growth and development that translates into an increase in the standard of living of the people, transfer of technology and managerial skills, favourable effect on balance of payment by stimulating export and contributed to the increase in trade integration (Adebayo et al., 2021; Enu et al., 2013). That is why developing and emerging economies rely heavily on FDI as their main source of foreign financing (Mansaray, 2017; Boateng *et al.*, 2015).

Though FDI flows are driven by the perceived opportunities that can be derived from the utilization of foreign capital injection into the economy to add to domestic savings and promote economic growth and development (Aremu, 1997), its inflows send a positive signal regarding the economic prospects and attractiveness of investment in a country (Wei & Zhu, 2007). As we operate in a highly competitive environment, economies strive to gainmore global productive activity associated with any industry through trade and FDI policies. Investment decisions by firms, especially Multinational Enterprises (MNEs), which primarily drive FDI flows, are adopted based on scenario analysis in which firm-specific advantages are compared regarding the costs of investments in diverse locations. However, MNEs also weigh macroeconomic factors before deciding on the position of FDI inflow (Sujit *et al.*, 2020). Aguiar and

Gopinath (2007) maintained that emerging economies face a greater risk than advanced nations due to macroeconomic instability. The principal among these possible threats is the sudden economic slowdown of the developing nations, which is an essential consideration that may interrupt investing firms' activities (Adebayo *et al.*, 2021; Siklar & Kocaman, 2018).

Nigeria, in a bid to advance and ensure all-round growth and development, has had a checked history of economic and political development, which reflects in the erratic inflows of FDI, changes in political and policy regimes as well as uneven growth patterns, has evolved and designed various public sector policies and reforms aimed at macroeconomic stability to position Nigeria as the preferred FDI flow destination. Despite these reforms, serious challenges still hamper the massive attraction of FDI inflows to Nigeria compared to other emerging economies such as Malaysia, Thailand, Vietnam, Brazil, and Mexico. In the analysis of the past trends of FDI inflows into Nigeria, FDI stood at $1.96 billion in 1994, then gradually declined to $1.14 billion in 2000 and rose drastically to $4.98 billion in 2005. Slowly increased to $6.03 billion in 2010 and fell further to $3.34 billionin 2015; the decline continued to 2020 when the volume of FDI inflows to Nigeria stood at $2.39 billion (World Bank, 2022). A closer view of the trend of the macroeconomic variables revealed a very volatile condition.

Furthermore, the nexus between macroeconomic variables and FDI flow has been a major point of debate among scholars, as there is still no consensus on the relationship between FDI inflows and selected major macroeconomic variables. This will make it imperative to examine how interest rate, economic growth, exchange rate, external reserve and inflation influence FDI inflows into Nigeria. Thus, this paper intends to add to the ongoing research by further investigating this relationship from the Nigerian context.

LITERATURE REVIEW

Foreign direct investment can be described as a movement of capital and other resources from a parent corporation in the home country to the subsidiary company, which is created through substantial equity interest in the firm established in the host country (Pugel, 1981). Similarly, Adebayo *et al.* (2021) maintained that FDI is an investment aimed at controlling company ownership in one nation by an organization created in another. Also, Sujit *et al*. (2020) defined FDIas the establishment of new firms or acquisitions of companies or assets in another country. Thus, Physical investments made directly to the owners of assets in another country are termed foreign direct investments. The idea of direct control differentiates foreign direct investment from foreign portfolio investment.

According to Adebayo et al. (2021), FDI can be utilized as a tool to support sustained development in emerging economies such as Nigeria, even as Dunning (1980) maintained that the future advantages of MNE's participation in FDI operations are the low cost of production, effective supply in new locations, the management of strategic assets, and the creation of governance in foreign market practices then increased profitability. That is why FDI flow is largely industry-specific, and hence, the determinants of the industry pattern of FDI are directly related to characteristics of market structure and market conduct across industries (Pugel, 1981). Understanding this, economies strategize incentive policies to attract FDI in their respective countries.

Empirical review

Ojiaku and Odionye (2020) believe that the environment in which businesses function is influenced by several forces, one of which is its macroeconomic performance. Therefore, the stability and instability of the macroeconomic performance indicators reflect a country's economic situation, and the level of business activities and growth determines the attractiveness of the inflow of foreign direct investments into the country. Empirical studies such as Onyibor and Akinsola (2021), Kueh and Soo (2020), Bosire (2018), Agrawal (2015) and Yol and Teng (2009) have supported the existence of a relationship between FDI and macroeconomic variable. The stability of the macroeconomic variables goes a long way to reflect the condition of the host economy, and participants in FDI keep a very close watch on them as it aids decisions on the destination of the investment. Economies with volatile macroeconomic environments may suggest higher risk levels and discourage FDI inflows against economies with more stable macroeconomic variables. Aguiar and Gopinath(2007) maintained that emerging economies face a greater risk than advanced nations due to macroeconomic instability, thus attracting more FDI. Therefore, Akinlo (2004) posited that for any economy to attract FDI, it must first improve and ensure stability in its economic environment by enabling it for investors.

Using yearly data from 1981 and 2018 from the CBN Statistical Bulletin, Adebayo et al. (2021) examined the linkages between FDI inflows and some selected macroeconomic indicators (exports, gross capital formation, trade openness, inflation, and economic growth). The ARDL and wavelet coherence

techniques were adopted to evaluate the data collected. The findings from the ARDL long-run estimate reveal that exports and trade openness exert a positive impact on FDI inflows. Furthermore, the results of the wavelet coherence-based causality and wavelet correlation techniques further provide supportive evidence for the ARDL technique.

With evidence from Cambodia, Laos, Myanmar, and Vietnam, Kueh and Soo (2020) explored the link between FDI inflows, market size, exchange rate, labour force, and inflation using yearly data between 2000 and 2016. The relationship was examined using co-integration, FMOLS, and panel Granger causality. The findings indicated that co-integration exists among the variables employed in the long run. Also, a one-way causality was found running from inflation and exchange rate to FDI inflows.

AsiamahOfori and Afful(2020)analyzed the determinants of FDI inflows in Ghana by utilizing time-series data between 1985 and 2015. The findings from the result of the OLS regression revealed that government expenditure, infrastructure, and external debt exerted a significant impact on FDI inflows. In contrast, the Granger causality test revealed a one-way causality from the interest rate, government expenditure, and inflation to FDI inflows.

Ojiaku and Odionye (2020) study examined the impact of selected macroeconomic variables on foreign direct investment in Nigeria. Data was sourced from the Central Bank of Nigeria Statistical Bulletin between 1981 and 2017. In analyzing the data collected, the Auto-Regressive Distributed Lag (ARDL) bound co-integration model was utilized to examine the short-run and long-term impacts of the selected variables on FDI. Findings indicated that a long- and short-run relationship between FDI and selected macroeconomic variables exists in Nigeria. Foreign exchange rates, gross domestic product, and crude oil prices positively and significantly impacted FDI in the short and long run. At the same time, inflation negatively and significantly impacted FDI in the short and long run.

Relying on data from the US for the period 1960–2019 sourced from the Federal Reserve Economic Data (FRED) database and the World Bank Governance Database, Sujit *et al*. (2020) evaluated the impact of macroeconomic, governance and risk factors on foreign direct investment (FDI) intensity. The ordinary least square regression method was used in analyzing the data collected, and the result suggested that infrastructural investments, exchange rate, corporate profitability, exports and imports all had positive and significant impacts, while inflation and regulations negatively related to FDI intensity.

Employing time-series data between 1975 and 2017, Borhan and Subramaniam (2020) explored the interactions between FDI inflows, market size, inflation, economic growth, exchange rate, and trade openness in India. The short- and long-run dynamics between FDI inflows and the other macroeconomic variables were investigated by utilizing the ARDL techniques. The bound test reveals co-integration among the variables in the long run. Furthermore, there is a positive link between FDI inflows and economic growth, even though the interest rate and inflation impact FDI inflows negatively. Additionally, there was no interaction between FDI inflows and the other macroeconomic variables in the short run.

Musyoka and Ocharo (2018) evaluated the impact of inflation, competitiveness exchange rates, and interest rates on FDI inflows in Kenya, utilizing annual data from 1970 to 2016. The OLS technique was the preferred estimation technique, and findings revealed that exchange rate and interest rate negatively impacted FDI inflows. At the same time, inflation had an insignificant impact on FDI inflows in Kenya.

Utilizing a GLS estimation method on Panel data from 12 eastern African economies spanning between 2004 and 2016, Bosire (2018) investigated the determinants of FDI inflows. Results suggested that exchange rate and economic growth positively impact FDI inflows, while interest rate negatively impacts foreign direct investments.

Mansaray (2017) examined the macroeconomic determinants of foreign direct investment inflows into post-conflict Sierra Leone from 2002-2015. Utilizing co-integration and VECM in evaluating the data collected, findings from the study suggested that trade openness and interest rate had a positive and significant impact on FDI flows, Gross fixed capital formation, inflation rate and exchange rate exerted a positive but insignificant impact on FDI flows. At the same time, GDP negatively and significantly impacted FDI flows in Sierra Leone.

To investigate Determinants of foreign direct investment and its causal effect on economic growth in Nigeria, Florence et al. (2017) used annual time-series data ranging from 1984 to 2015 that was analyzed using VECM techniques to investigate this dynamic relationship. The result indicated that a long-term co-integration exists among the variables. Also, economic growth, inflation, exports, and interest rates have had a negative impact on the FDI inflows into Nigeria.

Using time-series data from India between1981 and 2014, Sultana (2016) explored the impact of macroeconomic variables on FDI inflows in India. Adopting the co-integration Granger causality test as

an analytical technique, the findings suggested that interest rate and inflation have a negative relationship with FDI inflows. In contrast, exchange rate, exports, imports, and economic growth positively impact FDI inflows. Additionally, the Granger causality test revealed a one-way causality between imports and economic to FDI inflows in India, while a feedback causality was found between exports and FDI inflows.
Uwubanmwen and Ogiemudia (2016) evaluated the impact of foreign direct investment on economic growth in Nigeria using annual time series data covering the period 1979 to 2013 sourced from the Central Bank of Nigeria Statistical Bulletin. The data were analyzed using the Error Correction Model. Findings suggested that in the short run, FDI has a positive and significant impact on the economic growth of Nigeria, while the impact was not significant in the long run.
With evidence from the BRICS (Brazil, Russia, India, China and South Africa) economies, Agrawal (2015) evaluated the impact of foreign direct investment on economic growth. Data collected from 1989 to 2012 was analyzed using Co-integration and Causality analysis. The results indicated a long-run equilibrium relationship between foreign direct investment and economic growth. Also, causality tests indicate that long-run causality runs from foreign direct investment to economic growth in these economies.
Otto and Ukpere (2014) examined the impact of foreign direct investment on economic development and growth in Nigeria. Data was collected over 41 years, sourced from the CBN Statistical Bulletin, and multiple regression analysis was the preferred estimation technique in analyzing the data collected. Results indicated that foreign direct investments positively and significantly impacted Nigeria's economic growth.
Enu *et al.* (2013) evaluated the determinants of foreign direct investment inflows to Ghana, relying on data from 1980 and 2012. Johansen's co-integration approach was adopted in analyzing the data collected. Results revealed that the variables were not co-integrated, so the vector autoregressive model was estimated. The result showed that the first year of foreign direct investment, the last two years of exchange rate and trade openness were statistically significant.
Vijaykumar *et al.* (2010) investigated the determinants of FDI in BRICS countries' panel co-integration. Findings revealed that GDP, labour cost, infrastructure, real exchange rate, and gross capital formation significantly impacted FDI flows in BRICS.
Yol and Teng (2009) evaluated the domestic determinants of foreign direct investment flows in Malaysia. The Error correction methodology was adopted, and findings reveal that Real Exchange rate, GDP growth and infrastructure investments positively influenced FDI flows, while export volume negatively influenced FDI flows.
The empirical literature above proved that there still needs to be a consensus on the relationship between FDI inflows and macroeconomic variables. A proper review showed that most empirical works employed macroeconomic variables such as inflation, GDP, and exchange rate. To the authors' knowledge, no previous studies have used external reserves as a proxy for macroeconomic variables. Also, the data used did not reflect recent events. Hence, this study was undertaken using recent data to fill these gaps.

METHODOLOGY

The ex-post facto research design was adopted, given the nature and scope of the investigation. Secondary annual time series data for the variables under investigation were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and the World Bank database. The dataset covered the period 1984 to 2021, which was predicated on the accessibility and availability of data. In analyzing the data collected, the paper employed the ordinary least squares estimation technique of multiple regression analysis, the Autoregressive Distributed Lag (ARDL) approach to the Co-integration test and the Vector error correction model. Furthermore, other complementary diagnostic tests, such as the unit root, serial correlation, heteroscedasticity, and stability tests, were conducted to avoid spurious results.
To estimate the models in equations (3) and (4), the Autoregressive Distributed Lag (ARDL) method developed by Pesaran *et al.* (2001) was utilized. This choice was based on the assumption that the ARDL technique is more appropriate for small sample size and can be implemented irrespective of whether the underlying variables are I (0) or I (1) and provides very efficient and consistent test results in small and large sample sizes. Under this approach, the long-run and short-run parameters of the model are estimated simultaneously.

Model Specification

In an attempt to evaluate the impact of macroeconomic variables on foreign direct inflows into Nigeria, the model of Musyoka and Ocharo(2018) was adapted and then modified to reflect the objectives of the study.

The model stated as follows;
FDI = f(EXG, EXT, GDP, INFL, INTR)…(1)
The implicit form of the natural log is expressed as
$lnFDI_t = β0+β1lnEXG_t+β2lnEXT_t+β3lnGDP_t+β4lnINFL_t+ β5lnINTR_t+ μ_{t ...}$(2)
Where:

FDI	=	Foreign Direct Investment
EXG	=	Exchange rate to the dollar
EXT	=	External reserve
RGDP	=	Real Gross domestic product
INFL	=	Inflation rate
INTR	=	Interest rate

From equation (2), the long-run relationship can be written as;
$lnFDI_t = λ_0 + λ_1 lnEXG_t + λ_2 lnEXT_t + λ3lnGDP_t + λ4INFL_t + λ5lnINTR_t + μ_t$…. (3)
While the error correction representation of the series used to estimate the short-run association can be specified as follows:
$ΔlnFDI_t = λ_0 + λ_1 ΔlnEXG_t + λ_2 ΔlnEXT_t + λ3ΔlnGDP_t+ λ4ΔINFL_t + λ5ΔINTR_t + ηECMt\text{-}1 + εt$...(4)
In the above model, Δ is the first-difference operator, and λ indicates long-run coefficients.
The hypothesis of no co-integration deals with H0: $λ1 = λ2 = λ3 = λ4 = λ5 = 0$
and H1: $λ1 \neq λ2 \neq λ3 \neq λ4 \neq 0$ is an alternative hypothesis of co-integration.
The *a priori* expectation of the parameters is given as $β_2$ and $β_6$ <0, $β_3$,$β_4$ and $β_5$>0

Table 1: Synopsis of Variables' Measurement/Description

Name of variable	Acronym	Measurement	Source	*a priori* expectations
Foreign direct investment	FDI	Foreign Direct Investment inflows into Nigeria	World Bank statistical database	
Exchange rate	EXG	Nominal exchange rate to the dollar	CBN (2021)	Negative (-)
External reserve	EXT	Average value of Nigeria external reserve	CBN (2021)	Positive (+)
Real Gross domestic product	GDP	Value of Gross Domestic Product	World Bank statistical database	Positive (+)
Inflation rate	INFLA	Rate of Inflation in the economy	CBN (2021)	Positive (+)
Interest rate	INTR	Maximum lending rate	CBN (2021)	Negative (-)

Source: Field survey (2023).

RESULTS AND DISCUSSIONS

Estimation of the econometric model specified in this study was preceded by an examination of the statistical properties of the series, which is presented in Table 2.
Table 2 shows the mean value for the exchange rate, external reserve, FDI, RGDP, inflation rate and interest rate to beN80.10, 20520.33, 17.98, 2862.216, 19.5% and 23%, respectively. Also, within the study period, the standard deviation for exchange rate, external reserve, FDI, RGDP, inflation rate, and interest rate were57.88,17515.74, 2548.015, 19.14 and 5.16.
Moreover, the skewness value of 0.30, 0.42, 1.05, 0.39, 1.84 and 0.01 was observed for the exchange rate, external reserve, FDI, RGDP, inflation rate and interest rate, respectively, showed the positive distribution of the value curve, which indicates that the value tends to increase as the years increase. Furthermore, the kurtosis value for the exchange rate, external reserve, FDI, RGDP, inflation rate and interest rate were 2.34, 1.66, 2.89, 1.56, 5.28, and 3.15, respectively. Since the variables all had average kurtosis ≥ 2, this indicates the existence of platykurtic characteristics in the series.

Table 2:Summary Statistics, using the observations 1984 – 2021

	EXG	EXT	FDI	RGDP	INFL	INTR
Mean	80.10855	20520.33	2862.216	5.18E+11	19.50945	23.49501
Median	94.10171	10277.49	1874.040	3.92E+11	12.16854	22.62250
Maximum	200.1593	58472.88	8914.890	1.09E+12	76.75887	36.09000
Minimum	0.741667	981.8083	193.1400	1.03E+11	0.223606	11.75000
Std. Dev.	57.88804	17515.74	2548.015	3.60E+11	17.98396	5.163490
Skewness	0.303349	0.425833	1.052063	0.398043	1.840019	0.013436
Kurtosis	2.341150	1.663364	2.899818	1.563881	5.284425	3.155838
Jarque-Bera	1.236673	3.872562	6.840970	4.156630	28.92365	0.038554
Probability	0.538840	0.144239	0.032697	0.125141	0.000001	0.980908
Sum	2964.016	759252.2	105902.0	1.92E+13	721.8497	869.3154
Sum Sq. Dev.	120636.9	1.10E+10	2.34E+08	4.66E+24	11643.22	959.8185
Observations	37	37	37	37	37	37

Source: Computation by authors with E-view 9.0.

Conducting time series analysis, variables should be tested for unit root before further operations. Though the ARDL framework may not require pretesting, the aim is to ensure that I(2) variables do not exist. In this study, the conventional Augmented Dickey-Fuller ADF test for unit root was conducted, and the result is presented in Table 3.

Table 3: Summary of Augmented Dickey-Fuller (ADF) Unit Root Tests Result

Variables	ADF Test Statistics	Critical Values @ 5%	P-value	Order of Integration
*Ln*FDI	-3.529794	-2.938987	0.0123	I(1)
*Ln*EXG	-8.825090	-3.595026	0.0000	I(1)
*Ln*EXT	-3.976082	-3.557759	0.0200	I(1)
*Ln*FDI	-4.241243	-3.552973	0.0105	I(1)
*Ln*INFL	-4.771214	-3.540328	0.0025	I(0)
*Ln*INTR	-3.764297	-3.540328	0.0305	I(0)

Source: Computation by authors with E-view 9.0.

The ADF result presented in Table 2suggests that the time series were integrated of mixed order since comparing the t-statistic values of foreign direct investment, exchange rate, external reserve, gross domestic product, interest rate and inflation rate in which their respective t-statistics are greater than the critical values, it therefore suggest the series were stationary at first difference.

ARDL Bounds Test

Given that it has been established that the I(2) variable does not exist in series, the conditions for the ARDL framework have been satisfied, the ARDL bound testing approach to co-integration was conducted, and the result is presented in Table 4**.**

Table 3: Result of the ARDL Bounds Test for Co-integration

Variable	F-statistics	Co-integration
F(FDI/EXG, EXT, GDP, INFL, INTR)	4.201725	Cointegration
Critical value	Lower bound	Upper bound
10%	2.26	3.35
5%	2.62	3.79
1%	3.41	4.68

Source: Computation by authors with E-view 9.0.

From the result in Table 3, the F-statistic coefficient of 4.20, which is greater than the upper bound and lower bound values of 2.62 and 3.79 at a 5 per cent level of significance, supports the conclusion that a long-run relationship exists between foreign direct investment, exchange rate, external reserve, gross domestic product, interest rate and inflation rate, which is a desired outcome. With evidence of

co-integration, the next step is to estimate the long-run parameters and the result presented in Table 4

Table 4: Estimated long-run relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNEXG	-0.505186	0.139962	-3.609453	0.0036
LNEXT	0.657735	0.376336	1.747733	0.1060
LNGDP	0.311646	0.675263	0.461519	0.6527
LNINFL	-0.386553	0.242146	-1.596363	0.1364
LNINTR	-6.555629	1.419862	-4.617089	0.0006
C	16.729517	16.576848	1.009210	0.3328

Source: Computation by authors with E-view 9.0.

The result presented in Table 4 shows that the exchange rate negatively and significantly impacts foreign direct investment. This is based on a coefficient and P-value of -0.501 and 0.00, respectively. This is consistent with *an a priori* expectation, suggesting that exchange rate depreciation makes investment in the host country cheaper and attractive, increasing FDI in the country. The external reserve, with a coefficient and P-value of 0.65 and 0.10, respectively, confirmed the positive impact of external reserve on foreign direct investment in Nigeria, but the impact is non-statistically significant. This condition also aligns with *a priori* expectation and theoretical postulation.

Furthermore, the gross domestic product expressed a positive but insignificant impact on foreign direct investment in Nigeria, judging from its coefficient and P-value of 0.31 and 0.65, respectively. This is consistent with the theoretical postulation and findings of Borhan and Subramaniam (2020) and Uwubanmwen and Ogiemudia (2016) but inconsistent with the findings of Adebayo et al. (2021). On the other hand, the inflation rate transmitted a negative and insignificant impact on foreign direct investment in Nigeria. This was evidenced by the coefficient and P-value of -0.38 and 0.13, respectively. The result was also in line with *a priori* expectations and the findings of Borhan and Subramaniam (2020) but also inconsistent with the findings of Adebayo et al. (2021). Finally, the interest rate impacted negatively and significantly on foreign direct investment in Nigeria, judging from its coefficient and P-values of -6.55 and 0.00, which is also consistent with *a priori* expectations and the findings of Bosire (2018).

Short-Run Dynamic Regression Results

After the estimation of the long-run parameters, the short-run dynamic parameters within the ARDL framework were also estimated, and the result is presented in Table 5

Table 5: Result of the Short-run error correction estimate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOGFDI(-1))	-0.653806	0.270043	-2.421117	0.0323
D(LOGFDI(-2))	-1.522744	0.273925	-5.558978	0.0001
D(LOGFDI(-3))	-0.823620	0.229411	-3.590143	0.0037
D(LOGEXG)	-0.468750	0.185845	-2.522255	0.0268
D(LOGEXT)	0.610295	0.240684	2.535667	0.0261
D(LOGGDP)	-0.248870	0.741674	-0.335553	0.7430
D(LOGGDP(-1))	-0.806952	0.911625	-0.885180	0.3935
D(LOGGDP(-2))	-1.508382	0.918026	-1.643071	0.1263
D(LOGGDP(-3))	2.564611	0.723038	3.546996	0.0040
D(LOGINFL)	-0.139787	0.112331	-1.244423	0.2371
D(LOGINFL(-1))	-0.276293	0.095086	-2.905725	0.0132
D(LOGINFL(-2))	0.361941	0.125009	2.895306	0.0134
D(LOGINFL(-3))	0.295515	0.110204	2.681535	0.0200
D(LOGINTR)	-3.013820	1.271644	-2.370018	0.0354
D(LOGINTR(-1))	-0.474599	0.809599	-0.586214	0.5686
D(LOGINTR(-2))	1.325173	0.671805	1.972556	0.0720
ECT(-1)	-0.927875	0.294144	-3.154491	0.0083

Source: Computation by authors with E-view 9.0.

Results of the short-run dynamic coefficients in relation to the long-run association derived through the ECT equation, as shown in Table 5, revealed that the lagged error-correction term was as desired, negatively signed at -0.927 and significant at the 5% level, which supports the view indicating the existence of a short-run association between the variables. It also suggests that its adjustment speed of returning to equilibrium after a period of shock seems very high at 92.7 per cent.

Furthermore, the directions expressed by the short-run dynamic effect were not entirely maintained in the long run. A close examination revealed that the exchange rate negatively and significantly impacted foreign direct investment in Nigeria. This is evidenced in the coefficient and P-values of -0.468 and 0.02, which is consistent with *a priori* expectation and the findings of Adebayo *et al.* (2021), Sujit *et al.* (2020), Ojiaku and Odionye (2020), Musyoka and Ocharo (2018) and Sultana (2016). Also, external reserves positively and significantly impacted foreign direct investment in Nigeria. This conclusion is based on the coefficient and P-values of 0.61 and 0.02, which are consistent with *a priori* expectations. Gross domestic product expressed a positive but insignificant impact on foreign direct investment in Nigeria in all the lag periods. This is inconsistent with a priori expectations but aligns with the findings of Adebayo *et al.* (2021); this may result from the Nigerian economy's structure, which relies heavily on oil and gas as its mainstay. Meanwhile, the inflation rate negatively and significantly impacted the foreign direct investment inflows into Nigeria. This is also in line with *a priori* expectation and the findings of Ojiaku and Odionye (2020), Musyoka and Ocharo (2018) and Sultana (2016)

Finally, interest rates negatively and significantly impacted foreign direct investment inflows into Nigeria. This is based on the coefficient and P-value -3.01 and 0.03, respectively. This is consistent with *a priori* expectations and the findings of Musyoka and Ocharo (2018), Bosire (2018) and Florence et al. (2017).

Results of diagnostic tests

To ensure the reliability of the results, tests for heteroscedasticity, serial correlation, and stability of the model were conducted, and the outcome of the diagnostic test was presented in Table 6.

Table 6. Results of diagnostic tests

Test Statistics	P-value	
Breusch-Godfrey Serial Correlation test	0.185185	0.8437
ARCH Heteroskedasticity Test	3.192916	0.0841
Ramsey RESET Test (log-likelihood ratio)	0.236906	0.6360

Source: Computation by authors with E-view 9.0.

Based on the result in Table 6, the tests show that the model performed well in all the diagnostic tests conducted. The result shows no suspicion of serial correlation among variables and no evidence of

heteroscedasticity in the model. Ramsey reset test result indicates no evidence of omitted variable problem in the results, suggesting the result cannot be regarded as being spurious and can be relied upon,

CONCLUSION AND POLICY IMPLICATION

The study evaluated the impact of macroeconomic variables on FDI inflows in Nigeria, relying on time series data sourced from the CBN statistical Bulletin for the period covering 1986 to 2020. The study used the bounds testing (ARDL) approach to co-integration and other diagnostics tests to analyze the data collected. Given the strength of the empirical analysis of the secondary data, findings from the study indicated a long-run and short-run relationship between macroeconomic variables and FDI. Based on the findings of this study, the study recommended that monetary authorities maintain a single exchange rate for the economy to reduce the activities of currency manipulators. Also, the government should reduce corruption-laden expenditures, such as the subsidy regime, to improve the level of our external reserves, which will help support our currency and instil confidence in the economy. Policies such as tax holidays and genuine diversification of the economy should be rigorously pursued. Furthermore, a moderate contractionary monetary policy should be pursued to reduce inflation. Finally, the government should improve the infrastructure, such as adequate power supply, to reduce operating costs and interest bank charges.

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EFFECT OF GOVERNMENT EXPENDITURE ON AGRICULTURAL SECTOR ON AGRICULTURAL VALUE-ADDED GROWTH RATE IN NIGERIA

[1]Agbaeze, Clifford C., [2]Adegun, Emmanuel A., and [3]Ozor, Kelechukwu C.
[1]Department of Banking and Finance, Michael Okpara University of Agriculture, Umudike, Nigeria
[2]Department of Accounting, Adeleke University, Osun State, Nigeria
[3]Department of Banking & Finance, Alex Ekwueme Federal University Alike-Ndufu, Ebonyi State

ABSTRACT
This study was carried out to evaluate the impact of government expenditure on the agricultural sector on the agricultural value-added growth rate in Nigeria between 2003 and 2022 using annual time series data sourced from the Central Bank of Nigeria Statistical Bulletin and World Bank Development. Agricultural value-added growth rate was used as the dependent variable, while government expenditure on agriculture was used as the independent variable. Auto Regressive Distributed Lag (ARDL) Model was used to analyze data. The results of the ARDL Model revealed that government expenditure on the agricultural sector had a significant negative relationship with Nigeria's agricultural value-added growth rate. Therefore, the researchers recommended that the government fund or support intending agricultural investors and producers through financial initiatives that would help develop value-added enterprises/businesses.
Keywords: government expenditure, agricultural value added, agricultural financing, agricultural sector, auto-regressive distributed lag model

INTRODUCTION
Agriculture is the science of the cultivation of soil for crops and the rearing of animals. Agriculture is as old as man himself, as it was the first occupation of mankind. Even with the evolution of modern civilization, it remains an essential part of the growth and development of any extant economy (Anthony-Orji *et al.*, 2020; Orji *et al.*, 2019; Ogbuabor & Nwosu, 2017). In Nigeria, the agricultural sector is a major sector that drives economic development and industrialization because of its importance in the provision of food for the increasing population, the supply of raw materials to the growing industrial sector, the generation of foreign exchange earnings, creation of employment opportunities, and provision of market for the product of the industrial sector (World Bank, 2016). Nigeria has a large expanse of arable land and a favorable climate for agriculture. As of 1990, the estimated arable land was 81 million hectares out of the Nigerian total of 91 hectares, 18 million hectares of which were classified as permanent livestock production pasture. This enables the production of various crops, livestock, forestry, and fishery products (Ewetan et al., 2017). The 1962–1968 development plan was the first national plan of Nigeria post-independence. Among its many objectives, the introduction of modern agricultural methods, agricultural extension services, and the supply of better farm implements were greatly emphasized.

This national plan was, to a large extent, achieved, and Nigeria became the leading producer of export crops such as cocoa, which was produced in the western region; palm oil, which was largely produced in the southern region; and groundnut, which was produced majorly in the northern region. According to the Central Bank of Nigeria (CBN) reports, in the 1960s, agriculture contributed about 60 percent to the nation's Gross Domestic Product (GDP) (CBN, 2016). The National Bureau of Statistics (NBS) reported that agriculture was the most important sector contributing to the country's output, employment, and foreign exchange earnings (NBS, 2014).

However, the sector's success was short-lived, and its share of contribution to the GDP of Nigeria declined drastically to 25 percent between 1975 and 1979. Later, it rose to 38 percent in 2002 but fell again to 20 percent in 2010. There has not been a significant change in agriculture's share of the GDP since then. This fall in agricultural production was owed greatly to the oil boom the economy experienced in the 1970s.

The 1970s brought about the emergence of the oil industry as the main driver of economic growth. Since then, agricultural production has been progressively declining regarding its annual contribution to Nigeria's GDP. The Nigerian economy became over-dependent on the oil sector, and this caused a decline in the revenue generated by the agricultural sector over time. The Nigerian government has recognized how detrimental the over-dependence on only one sector can be to the economy and has recently started to seek to diversify the economy through the development of other productive sectors aside from the oil sector.

The government has considered the importance and prospects of the agricultural sector, one of the major sectors it seeks to develop. There are other sources of generating employment and economic growth, but only a few can be compared with agriculture's ability to reduce poverty and enhance economic growth, especially at the early stages of development. For example, in Zambia and Nigeria, mineral wealth has yet to provide a platform for a wide range of employment opportunities, poverty reduction, and economic growth, as agriculture has proven to have done. With the increasing income and affordable food provided by a dynamic agricultural sector, the economic transformation will be fast, and economies will remain trapped in a cycle of low growth and poverty (Department for International Development, 2005).

Adequate financing is essential for any sector's successful development. Credit plays an essential role in the development of the agricultural sector of the economy. The agricultural sector depends more on credit as a source of finance than any other sector in the economy due to the seasonal variation in the returns of farmers and a changing trend from subsistence to commercial farming (Abedullah et al., 2009). The provision of suitable financial policies and enabling institutional finance for both subsistence and commercial agriculture have prospects of enhancing agricultural development, hence increasing the contribution of the sector in the generation of employment and foreign exchange earnings and increasing the income of economic agents engaged in agricultural practices (Olomola, 2010).

Since 1970, the government has established and implemented several agricultural financing policies. Some early agricultural policies established include the National Accelerated Food Production Program established in 1972, the Agricultural Development Program Established in 1975, and Operation Feed the Nation established in 1976, among many others. Many of these policies lasted only a short time to achieve their objectives. Over the years, inadequate finance has been identified as a major limiting factor to developing the agricultural sector in most developing countries, including Nigeria (Orji et al., 2014, 2020). The use of crude and obsolete tools and poor agricultural infrastructure, such as poor transport facilities, has been an obvious characteristic of the sector. These appalling characteristics are attributed to the lack of financial resources needed to acquire modern and improved farm implements and new farming methods and enhance infrastructure. The government sees this limitation and has, since 1970, introduced and implemented various agricultural financing policies in order to achieve an effective system of sustainable agricultural financing schemes, programs, and institutions that can provide credit facilities to agricultural producers, processors, and marketers at all levels (Eze *et al*., 2010). Even with all these policies and strategies of the government and other institutions to broaden the framework of sustainable growth, the performance of the agricultural sector is still suboptimal.

Small-scale farmers dominate agriculture in Nigeria, and it is largely subsistent with low production capacity and stagnancy, and over 90 percent of agricultural output is accounted for by farmers with less than two hectares of land available for crop production (Federal Ministry of Agriculture and Rural Development, 2008). Many policies have been ineffective because of poor management or because macroeconomic policies affecting exchange rates, inflation, and cost of capital have drowned their impact.

Despite the natural endowments that the Nigerian soil is blessed with, the agricultural sector has continued to record a decline in productivity. The low availability of credit facilities, as well as corruption and sharp practices in financing agricultural development in Nigeria, has hindered the potential of the agricultural sector to boost economic growth and development and alleviate poverty in Nigeria. Other factors hindering the development of agriculture in Nigeria include socioeconomic and structural problems such as Poor and inefficient allocation of adequate funds to the agricultural sector, Unavailability of credits to local farmers, and lack of capacity building on the part of the farmers, which often result to loan default, High-interest rates on loan facilities which affect the borrowing ability of farmers in Nigeria and the inability of farmers to utilize credits granted due to inadequate formal training. Having realized the declining role of agriculture in economic development, which resulted in an increase in the poverty rate over the years, government over the years has put in place certain policy measures and programmes with a view of increasing the growth and development of agriculture, which will, in turn, bring about enhanced agricultural output and agricultural value assed in Nigeria. However, an evaluation of federal government capital expenditure on agriculture compared to the total federal government capital expenditure on other sectors shows that the agricultural sector needs more funding. This portrays a gloomy future for the sector development in the country. From 1980 to 2011, the federal government capital expenditure on agriculture was below 10% except in the following years; 1981, 1982, 1983 (the highest), 1985, 1986, 2001, 2002, 2004, 2005, 2007, 2008, and 2009 because these were the years that coincides or the year after with different government agricultural development policies and programmes such as the Green Revolution in 1980, the structural adjustment programme (1986), The Directorate of Foods, Roads and Rural

Infrastructure (1987). However, it was 5.7% but increased to 7.1% the following year, the Food for All programme in 1987, the Better Life for Rural Women programme in 1987, and the Rural Agro-Industrial Development Scheme.

This begs the question of whether agriculture is adequately financed in Nigeria and how much this finance impacts economic growth and development in Nigeria. Consequently, there is a need to undertake a study on this note to provide clear perspectives on the impact of agricultural sector financing on agricultural output and agricultural value-added growth rate in Nigeria by examining the effect of government expenditure on the agricultural sector on agricultural value-added growth rate in Nigeria. The study therefore hypothesized that

H_{01}: Government expenditure on the agricultural sector does not have a significant impact on the agricultural value-added growth rate in Nigeria

LITERATURE REVIEW

Concept of Agriculture

Akinboyo (2008) defines agriculture as the science of using the land to raise plants and animals. It is the simplification of nature's food webs and the rechanneling of energy for human planting and animal industries. Ogen (2007) states that from the standpoint of occupational distribution and contribution to the GDP, agriculture was the leading sector in the 1960s. Also, the Nigerian economy, like Brazil's, could be described as an agricultural economy during the first decade after independence. This is because agriculture served as the engine of growth of the overall economy of the two countries. Agriculture is the economic mainstay of most households in Nigeria and is a vital sector for the economy. The important benefits of the agricultural sector to Nigeria's economy include the provision of food, contribution to the gross domestic product, provision of employment, provision of raw materials for agro-allied industries, and foreign exchange earnings during the period of 1960s; Nigeria was the world's second-largest producer of cocoa, the largest exporter of palm kernel and the largest producer and exporter of palm oil. It was also a leading exporter of other major commodities such as cotton, groundnut, rubber, hides, and skins. Despite the reliance of Nigerian peasant farmers on traditional tools and indigenous farming methods, these farmers produced 70% of Nigeria's exports and 95% of its food needs. The agricultural sector, however, suffered neglect during the heyday of the oil boom in the 1970s.

Government initiatives in Agricultural infrastructure

Government initiatives in Agricultural infrastructure according to Oyaniran (2020) are as follow; Establishment of Special Agro-Industrial Processing Zones, the Federal government is establishing Special Agro-Industrial Processing Zones to concentrate agro processing activities and also SAPZs are aimed at boosting productivity, integrating production and enhancing the processing and exporting of select commodities; Development of Railway Infrastructure, as part of its plans to aid the free flow of goods, the government is in construction of rail lines across the country and once complete, these would serve as an alternative to road transport and enhance the distribution of goods and commodities within the country; Development of Road Infrastructure, in addition to its development of Railway infrastructure, the Federal government is also investing in the rehabilitation and construction of roads linking numerous parts of the country and a key example is the ongoing rehabilitation of the Lagos Badagry expressway which serves as a key component of the West African Trade Routes; Enhancement of Ports Infrastructure, in addition to the six existing seaports, the government has commenced the development of additional ports in AkwaIbom and Lagos to enhance its maritime capabilities and the Nigerian Ports Authority has also signed a MOU with the Royal Port of Antwerp Oyaniran (2020).

Government policies and strategies for agricultural development

Before the mid-1980s, economic development in Nigeria was largely rooted in development planning, so agricultural policies, programs, and projects were prioritized in the various plans. However, from the mid-80s to the late-90s, development planning was abandoned in favor of the structural adjustment plan. This opened the way for various policies and programs conceived and implemented over specific eras. From 2001 to 2007, the National Economic Empowerment and Development Strategy (NEEDS I and II) was drawn up and implemented with presidential initiatives to develop selected agricultural commodities. This was followed by the Seven-Point Agenda (2007 - 2010), culminating in preparing the Food Security Strategy Document in 2009. This ushered in the need to emphasize a value-chain approach to agricultural development. During this period of strategic planning, the Nigerian government also formulated sub-sector-specific policies, including (FAO, 2017):

i. The Land Resources Policy to guide the sustainable use of agricultural lands;

ii. The National Cooperative Development Policy; iii. The National Agricultural Mechanization Policy, and iv. The National Seed PolicyIn order to reduce rural exodus and empower the rural population to create jobs and wealth and contribute to poverty reduction, the National Policy on Integrated Development was formulated. This policy sought to integrate the Nigerian rural economy into the mainstream of the national development process through effective coordination and management. From 2001 – 2009, some innovative programs and projects covering such areas of agricultural development as production, marketing, storage, and financing were implemented. The most prominent of these programs and projects were the Special Program for Food Security (SPFS), the FADAMA II Program, the Presidential Initiatives on Cassava, Rice, Vegetable Oil, Tree Crops and Livestock, the Fertilizer Revolving Fund (FRF) and the restructuring of the Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB). In 2004, three key agricultural development and marketing companies were established. These included the Tree Crops Development and Marketing Company, the Livestock Development and Marketing Company, and the Arable Crops Development and Marketing Company. Targets were, among others, to strengthen agricultural production and provide useful marketing information and marketing outlets as well as storage and processing facilities (FAO, 2017). To innovate and facilitate credit delivery, the Central Bank of Nigeria (CBN) developed new strategies based on the Trust Fund model to reduce risks faced by banks in agricultural lending for production, processing, and marketing operations. As a result of implementing these policies, strategies, and specific initiatives, programs, and projects, the agricultural sector recorded significant advances globally and at the level of specific commodities. The tremendous increases in the outputs of staples like maize, millet, sorghum, cassava, rice, vegetable oil, and yam were notable. For example, annual cassava production increased from 33 million metric tonnes in 1999 to 46 million metric tonnes in 2006, while rice increased from 3.3 million metric tonnes to 4 million metric tonnes over the same period (FAO, 2017). In most developing countries (low and middle-income countries), the agricultural sector remains the largest contributor, providing inputs, food, employment opportunities, raw materials for other industries, provision of foreign earnings from the exportation of the surpluses, and, more importantly, the enormous advantage of the value added in the various production process (Izuchukwu, 2011).

Concept of Agriculture Value-Added

Before explaining the term agriculture value added, it is imperative to define adding value. Boland (2009) put it as the process of changing or transforming a product from its original state to a more valuable state. He gave an instance of the intrinsic value in commodities like field corn grown, harvested, and stored on a farm and then fed to livestock on that farm has value. Thus, a changed product's value is added, like processing wheat into flour. It can be referred to as a product by changing its current place and time and from one set of characteristics to other more preferred or desired characteristics in the marketplace.

Agriculture value-added involves changing raw agricultural products into a new structure through processing, packaging, drying, cooling, cleaning, or any other process or technique that differentiates the product from its original raw form (Mellissa, 2007). It entails transforming or converting raw materials into finished or semi-finished products and maintaining product quality. According to the (U.S. Department of Agriculture, Rural Business Development, 2015), Value-added products are defined as follows: "A change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam), the production of a product in a manner that enhances its value, as demonstrated through a business plan (such as organically produced products) and the physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system)." While value-added agricultural business is any activity, an agricultural producer performs outside of traditional commodity production to receive a higher return per unit of the commodity sold. Activities like agri-tourism and entertainment agriculture. Examples of value-added agricultural products include garlic braids, bagged salad mix, artisan bread, lavender soaps, and sausages. Adding value to agricultural products is a worthwhile endeavor because of the higher returns that come with the investment, the opportunity to open new markets and extend the producer's marketing season, and new recognition for the farm.

Agricultural Financing and Government Expenditure

Agriculture is also financed in Nigeria by the government through annual budgetary allocations. Generally, approved expenditures for agriculture increased significantly between 2004 and 2018, but allocations fall into different episodes. 28 Overall, budgeted expenditures for agriculture increased nearly 210 percent from 8.43 billion Naira in 2004 to 182.84 billion Naira in 2018. However, the increases were not uniform over time; periods of increases and decreases succeeded each other. The first growth phase

was between 2004 and 2009 when approved expenditures increased 180 percent to 162.71 billion Naira. This was the period identified above when government policy treated agriculture as a government-led development activity. The increasing budgets funded the numerous presidential initiatives on agriculture, including inefficient subsidies on inputs (seeds, fertilizer, agrochemicals). Actual government spending on agriculture also rose consistently yearly, as discussed earlier.

Approved expenditure for agriculture plunged significantly in 2010 and 2011 by 62.8 and 25.3 percent, respectively, from the preceding year's figures. The policy reform began in 2010 to transition from a government policy of "agriculture as a development activity" to a private sector-led economic activity. This policy led to the rediscovering of the subsidy agenda and the discontinuation of the government's direct procurement of agricultural inputs. The subsidy reform, particularly, was behind the massive agricultural budget reduction in 2010. This period also witnessed the introduction of the federal government's fiscal consolidation agenda, especially in 2011, when the government sought to "achieve more with less" by plugging loopholes in the financial and procurement systems that led to wasteful spending. Another contributing factor was splitting the Federal Ministry of Water Resources into two separate ministries in 2011 by the government. The fiscal consolidation agenda and the excising of water resources from agriculture further reduced the approved agriculture expenditure in 2011 (Michael, 2016).

The next two years witnessed an increase in 2012 to N82.78 billion and a further increase to 84.24 billion Naira in 2013. These increases were responses to the funding requirements of the new Agricultural Transformation Agenda, formally launched in mid-2011. They were also in response to political economy issues in the Nigerian budgeting system that resulted in the national assembly inflating the executive budget proposals beyond what the Ministry of Finance intended to or could fund (Michael, 2016).

The decline of the approved budget for agriculture in 2014 and 2015 was for differing reasons. The continuing fiscal consolidation program contributed to the –22.2 percent decline in 2014. Another probable contributing factor was the conclusion of the World Bank's First Agriculture Sector Development Policy Operation (AgDPO1), endorsed in 2013, but with the proceeds expected to flow in 2014. FMARD had expected to draw on the funds directly as additional extra-budgetary resources to budget provisions. However, a special audit finding on the AgDPO1 found, "It appears there was a misunderstanding of the concept of the budget support financing at the sectoral level, as FMARD had the impression that the funds could be earmarked for their sole use, making them withdraw the sum of $21,444,000.00 for their activities, which they later refunded" (Osakwe, 2017). It seems that this erroneous impression influenced the Ministry's budget request. The decline of 37.0 percent in the approved budget for 2015 was a fallout of the drastic decline in world oil prices, which began in mid-2014. The continuing decline forced the executive to withdraw the budget proposal submitted to the National Assembly for downward review.

The massive increases in budgetary allocation since 2016 are a policy response of the new government that came into power in mid-2015 to the agriculture challenge. Anchoring the economic diversification program on agriculture was a major platform of the government's electoral campaign. The government promised to raise agriculture to new heights. The increased allocations are an effort to realize these promises. Consequently, the government increased budgetary allocations to agriculture by 86.3 percent in 2016 despite the poor state of government revenues. However, the government could only achieve a budget execution rate of 73.9 percent in that year. This notwithstanding, the government further raised the budget for agriculture by 77.4 percent to N136.47 billion in 2017 and 34.0 percent to N182.84 billion Naira in 2018.

The increased approved allocations in recent years do not represent an improved share of agriculture in approved aggregate expenditure over the preceding years. The 2018 allocations translate to only 5.6 percent of approved total federal government expenditures for the year, which falls short of the AU target of 10 percent. However, the 2018 allocation is the federal government's highest achievement so far, i.e., considering the approved budget only and not the outturns. This exceeds the next best performance in budget allocations, which was 4.4 percent, achieved in 2009. Actual expenditure (outturns) for that year amounted to 5.8 percent. It still needs to be determined whether the government funded the improved budget allocations of 2017 and 2018 or whether the underfunding experience of 2016 has been repeated.

Theory of Financial Intermediation

This study is anchored on the theory of financial intermediation. The Theory of Financial Intermediation, as explained and modernized by (Bekun, 2015) in a research paper submitted to the Institute of Graduate Studies, Eastern Mediterranean University, North Cyprus, is a channel through which huge amounts of credit are available for spontaneous economic expansion. This theory was shown as the supply-leading role of financial institutions. (Robison, 2001) stated that the theory specifically postulates rural economic

growth emphasizing agricultural financing. The implication is that the financial sector provides upfront loans for farm products through subsidized credits and other agricultural inputs. The hypothesis considered the limitations farmers, growers, and tillers encounter in obtaining farm inputs and other agricultural implements, as well as bank interest. At the same time, (Robison,2001) argued that finance is a handmaid to economic expansion and that increased productivity promotes the demand for the financial instrument. For optimal performance, financial institutions' resources should be efficiently and effectively channeled to the needed sectors, such as agriculture (Nnamdi & Torbira, 2015). A long-term association between economic growth and credit disbursement was cited by (Nwakanma et al., 2014), showing that production increases as more and more credits are made available to farmers, leading to positive economic growth in Nigeria. The capacity of financial institutions to finance farm products via the banking system, according to Schumpeter (1934), promotes the growth and development of any nation. (Demetriadesand Hussein, 1996) and (Rajan&Zingalas, 1996) found solid evidence that the expansion of the financial sector aids the growth of the country's economic sectors. (Capiro&Demirguc-kunt, 1998) cited long-term credit connection with strong production and growth. However, (Obansa&Maduekwe, 2013) noted that the flow of credit to the agricultural sector via financial institutions became necessary due to dynamic changes in land tenure systems and new farming techniques.

Empirical Review

Enilolobo and Ode-Omenka (2018) investigated the impact of deposit money banks' credit on agricultural output in Nigeria from 1978 to 2016. Time series data were sourced from the statistical bulletin of the Central Bank of Nigeria. Ordinary least squares regression models were used in analyzing data. The findings of the study indicated that there was no long-run relationship between deposit money banks' credit to the agricultural sector and agriculture sector output in

Nigeria. Oguwuike (2018) assessed the effect of agricultural output on economic growth in Nigeria from 1981 to 2016. Secondary data on GDP, crop production, livestock, fishery, and forestry were obtained from the CBN statistical bulletin. The econometric methods of ordinary least squares regression analysis, co-integration test, and error correction mechanism were used. The co-integration result showed that co-integration exists among the variables in the model. From the results, the first and third lags of GDP were positively and significantly related to the current level of economic growth. The crop and livestock production coefficients were positively signed and statistically significant in influencing GDP. The coefficient of the fishery was positively signed but statistically not significant in influencing GDP. The coefficient of forestry was negatively signed but statistically significant in influencing GDP. Adesoye et al. (2018) analyzed the effect of agricultural value chain financing on agricultural productivity and economic growth in Nigeria from 1981 to 2015. The autoregressive distributed lag (ARDL) model was used to analyze the data. The inferential statistics revealed that expenditure on the agricultural value chain positively and significantly impacted agricultural sector output in Nigeria. The study revealed that farm lands, agricultural inputs, and machinery significantly influence agricultural productivity in Nigeria. The study further showed that capital, labor, and agricultural output had a positive and significant impact on the economy of Nigeria.

Shobande *et al.* (2018) researched the relationship between financial sector performance and agricultural growth in Nigeria between the first quarter of 1996 and the fourth quarter of 2017. Autoregressive Distributed Lag (ARDL) model was used to analyze the time series data collected. The study found that agricultural financing, money market, capital market, and exchange rate positively correlate with agricultural growth in Nigeria. In contrast, inflation has a negative effect on agricultural growth. Emmanuel et al. (2017) examined the impact of financing agricultural seed production on the yield of seed plants and export revenue in Nigeria. The study used secondary data covering 16 year period from 2000 to 2015. Data on expenditure on seed financing, agricultural productivity, and export revenue were used in the analysis. The research found that improvement in seed financing has a positive and significant impact on the yield of seed plants and that there is a positive relationship between the yield of seed plants and increased export revenue in Nigeria. The study by Ademola (2019) empirically assesses the impact of agricultural financing on the growth of the Nigerian economy. The study used gross domestic product as its dependent variable, while commercial banks' loans and advances, government expenditure on the agricultural sector, and lending rate were the independent variables. The study revealed that the size and amount of credit available to agriculture of the total amount of credit granted by the government has yet to impact Nigeria's economic growth level. This is as it shows a negative influence on Nigeria's output level. This also goes with the level of agricultural output, which maintained a negative but insignificant influence on the output level of Nigeria.

Meanwhile, the real interest rates and the total commercial bank loans to agriculture positively impacted Nigeria's output level. The reason is that when it involves the private sector and individual entities, the loans and advances will have a small quantity of regularity in disbursements. This is evident in the level and frequency of loans made available by the apex banks through Nigeria's commercial and specialized banks.

METHODOLOGY

This study adopted the ex post facto research design.The method of data collection for this study was the desk survey method of collecting data. It collects data from existing sources to get initial ideas about research interests.

Model specification

Based on this study's theoretical framework, objectives, and hypothesis, a model was specified to show the effect and relationship among/between the variables of interest. Based on this, the model showing the effect and relationship between /amongst the variables of interest was transformed into functional and econometric equations. Thus:

AP = f (AF) 1

Where:

AP = Agricultural production (proxied by agriculture value-added growth rate (AVA)

AF = Agricultural financing (proxied by government expenditure on agriculture (FGRA))

Therefore, given the models and their corresponding proxies, the econometric equations after the ordinary least square (OLS) dynamics shall be thus:

Equation one: AGRICULTURE VALUE ADDED GROWTH RATE (AVA)

$AVA = b_o + b_1 logFGRA + et$

RESULTS AND DISCUSSIONS

Table 4.1 Descriptive statistics

	AVA	FGRA
Mean	4.597095	41.57823
Median	4.188437	38.06551
Maximum	7.412883	78.37000
Minimum	2.122603	7.537355
Std. Dev.	2.013052	21.96838
Skewness	0.062137	0.274014
Kurtosis	1.380544	1.983291
Jarque-Bera	2.198401	1.111693
Probability	0.333137	0.573586
Observations	20	20

The descriptive statistics in Table 1 show that FGRA had a mean value of N4.157, while AVA had a mean value of approximately 4.6. Note that the Mean describes the average value for each data series in the model. From the analysis, FGRA had a Standard Deviation of 21.9, implying that it is the more volatile variable than AVA in the model, which has a standard deviation 2. The Table further reveals that both variables with positive skewness values are skewed slightly to the right. Kurtosis measures the peakness or flatness of the distribution of a series. The kurtosis of a normal distribution is 3. If it exceeds 3, the distribution is peaked or leptokurtic relative to the normal.

Conversely, if it is less than 3, the distribution is flat or platykurtic relative to normal distribution. Table 4.1 further reveals that both variables are flat or platykurtic since their kurtosis values are less than 3. Jarque-Bera (JB) tests whether the series is normally distributed or not. The test statistic measures the difference of the skewness and kurtosis of the series with those from a normal distribution. In the JB statistic, the null hypothesis, which states that the distribution is normal, is rejected at a 5% significance level. From the analysis presented in Table 4.1 above, all the variables had Probability values of greater than 0.05; as such, we conclude that all the variables are normally distributed. The number of observations is twenty, signifying the number of years of the study.

Inferential results

ARDL Model results with logAVA as Dependent Variable

Table 4.2 Result of ARDL Model for model (1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(AVA(-2))	0.382460	0.213209	1.793828	0.1031
LOG(FGRA)	-1.035153	0.305518	-3.388187	0.0069
C	8.858661	2.740576	3.232408	0.0090
R-squared	0.926126	Mean dependent var		1.370431
Adjusted R-squared	0.874415	S.D. dependent var		0.477666
S.E. of regression	0.169275	Akaike info criterion		-0.413481
Sum squared resid	0.286541	Schwarz criterion		-0.017760
Log-likelihood	11.72133	Hannan-Quinn criter.		-0.358916
F-statistic	17.90948	Durbin-Watson stat		1.681182
Prob(F-statistic)	0.000066			

Source: Researchers' analysis with e-views 10 output (2023)

The Auto Regressive Distributed Lag (ARDL) Model result, as shown in Table 4.2 above, suggests that government expenditure on the agricultural sector (FGRA) has a significant negative relationship with Nigeria's agricultural value-added growth rate. A percentage increase in FGRA would bring about a 104 percent decrease in AVA. A keen observation of the result showed that the R-squared and Adjusted R-squared were approximately 0.93 and 0.87, respectively. This means that the explanatory variables accounted for about 93% of variations in the explained variable. Put differently, about 93% of the variation in agricultural value added to the independent variables explained the growth rate. The remaining 7% may be attributed to variables not captured in the model (stochastic variables).

Post estimation test

Table 4.3 Test for Auto-correlation

Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob*
. |* . |	. |* . |	1	0.200	0.200	0.8513	0.356
.**| . |	***| . |	2	-0.319	-0.374	3.1408	0.208
.**| . |	. | . |	3	-0.214	-0.062	4.2437	0.236
. | . |	. | . |	4	0.061	0.017	4.3403	0.362
. |* . |	. | . |	5	0.091	-0.030	4.5682	0.471
. | . |	. | . |	6	-0.016	-0.024	4.5759	0.599
. | . |	. |* . |	7	0.047	0.108	4.6478	0.703
. | . |	. *| . |	8	-0.038	-0.104	4.6993	0.789
. *| . |	. *| . |	9	-0.176	-0.135	5.9334	0.747
. | . |	. | . |	10	-0.058	0.010	6.0823	0.808
. |* . |	. | . |	11	0.080	-0.031	6.4152	0.844
. *| . |	.**| . |	12	-0.116	-0.251	7.2284	0.842

Source: Researchers's analysis with e-views 10 output (2023)

This test is carried out to further test for autocorrelation. The result of the Correlogram Q-Statistic in Table 4.3 suggests that the variables are free from autocorrelation.

The correlogram Q- Stat. table indicates that all p-values were >5%, hence the conclusion that the model was free from autocorrelation.

Test for serial correlation

Table 4.4 Test for serial correlation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.934533	Prob. F(2,6)	0.4433
Obs*R-squared	4.275371	Prob. Chi-Square(2)	0.1179

Source: Researchers's analysis with e-views 10 output (2023)

The Breusch-Godfrey Serial Correlation LM Test in Table 4.4 above showed that the probability values of 0.4433 and 0.1179 are statistically insignificant at a 5% significance level. The results show that the model is free from serial correlation.

Test of hypothesis

Decision Rule: The researchers used critical values like p-value as the basis for acceptance and rejection of null hypotheses. Where the critical p-value computed is less than a 5% significance level, the variable was considered significant. Hence, it was rejected.

H_{01}: There is no significant impact of government expenditure on the agricultural sector on the agricultural value-added growth rate in Nigeria

Variables	Coefficient	t-Statistic	P-value
LOGFGRA	-1.035153	-3.388187	0.0069

Source: Extracted from Table 4.2

The test of hypothesis ($H0_2$) revealed that the p-value of LOGFGRA is less than 0.05 significance level, with a probability value of 0.0069. The null hypothesis, which states that government expenditure has no significant impact on the agricultural sector on agriculture value-added growth rate in Nigeria, is rejected.

CONCLUSION AND RECOMMENDATION

The study evaluated the impact of government expenditure on the agricultural value-added growth rate in Nigeria using annual time series data from 2003 to 2022. The study used the Auto Regressive Distributed Lag (ARDL) Model to ascertain how government expenditure influenced Nigeria's agricultural value-added growth rate. Empirical results revealed that government expenditure on agriculture significantly affected Nigeria's agricultural value-added growth rate. This study concluded that government expenditure significantly affects Nigeria's agricultural value-added growth rate within the referenced period. The researchers recommended that the government fund or support intending investors and producers of agricultural-related products through financial initiatives that would help develop value-added enterprises/businesses.

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NIGERIA'S HEALTH EXPENDITURE AND LIFE EXPECTANCY (1990 -2022)

[1]Chukwuma-Ogbonna Joyce A., [1]Ogbonna Chukwuma. G., and [2]Nwachukwu Edwin U.
[1]Department of Economics, Michael Okpara University of Agriculture, Umudike.
[2]Department of Economics, Nnamdi Azikiwe University Awka.
Corresponding Author: chuksgabriel40@yahoo.com

ABSTRACT
The ARDL was used in this study to examine the relationship between Nigeria's health expenditure and life expectancy from 1990 to 2022. The analysis starts with examining the stationarity of the data set using the Augmented Dickey-Fuller (ADF) unit root test. The bounds test confirmed the existence of a long-run association among the variables in the model. In the long run, government recurrent expenditure on health (GREH) and government capital expenditure on health (GCEH) negatively influenced life expectancy, while out-of-pocket expenditure on health and life expectancy positively impacted life expectancy. In the short run, Secondary School enrollment maintained a positive relationship with Life Expectancy. At the same time, government recurrent expenditure on health, government capital expenditure on health, and out-of-pocket expenditure on health negatively correlated with Life expectancy.Therefore, this study recommends increased budgetary allocation for capital projects to the health sector and incorporating more state-of-the-art technology; improving welfare packages for health workers, which will reduce the brain drain currently faced in the health sector, and extensive universal health coverage for Nigerian and free health screening programs for the average and low-income earners.
Keywords: ARDL, Out of Pocket Expenditure, Life Expectancy.

INTRODUCTION

A nation's ability to develop its human resources depends on its citizens' ability to maintain their health - an essential component of personal well-being. It is challenging to carry out economic activities when one's health is poor, and even when one does, it is unlikely to be productive (Cremieux et al., 1999, as cited in Matthew *et al.*, 2015). As a result, the state of one's health is a crucial indicator of the economy's level of development. Life expectancy is now a prominent and frequently used indicator of health status (Ojo et al., 2020; Oladosu *et al.*, 2022).

Nigeria, a developing nation, understands the value of health in fostering national development, as shown by its incorporation into the constitution (Ahonkhai et al., 2023). The 1999 Constitution requires all Nigerians to access quick, safe, restorative, and rehabilitative healthcare. Nigeria's life expectancy, estimated at 47.9 years in 2003 (up from 45.8 years in 1999 but down to 47 years in 2011) (Matthew *et al.*, 2015), has yet to align with this objective.

According to recent data from the World Bank (2021), life expectancy in Nigeria in 2019 was 54.49 years for both sexes, which is still significantly lower than global expectations. The United Nations Population Fund (UNFPA) (2019) supported these findings, emphasizing that the average Nigerian's life expectancy in 2019 was only marginally higher than that of residents of Sierra Leone, Chad, and the Central African Republic, whose corresponding ages were 53, 54, and 54 years.

Given these alarming health statistics for Nigeria, health spending in the theoretical and empirical literature significantly determines life expectancy. In order to improve population health and life expectancy, leaders, policymakers, and nations focusing on development frequently use health expenditure as a strategy (Iyakwari et al., 2023). This includes private and public spending on healthcare and other services. According to Lichtenberg (2004), cited in Gwaison and Maimako (2020), increased public spending on health services and individual healthcare spending may increase life expectancy. The fundamental premise is, therefore, that maintaining adequate and effective health spending is essential to enhancing health status. The economic situation in Nigeria, where health investments have not significantly increased life expectancy, runs counter to this principle. According to World Bank statistics (2022), despite rising from 0.13 billion in 2000 to 99.90 billion in 2010 and 202.36 billion in 2016, health expenditures only made a modest contribution to economic growth, falling from 5.05% in 2003 to 3.42% in 2013 and further to 3.38% in 2020 (Wasiu, 2020).

Despite these coordinated attempts, Nigeria's life expectancy has not significantly increased, falling short of expectations worldwide. The economy's insufficient health spending is the leading cause of this

shortfall. The breakdown of current health spending shows that this is the case, with household health spending consistently outpacing government health spending. For example, household health spending increased from 60.16% in 2000 to 76.88% in 2010 and 74.68% in 2022. Government health spending, on the other hand, has steadily decreased; it was 18.31% in 2000, 13.6% in 2010, and 14.97% in 2020. Notably, government health spending has fallen short of the "Abuja Declaration" target of 15% over the past 20 years, averaging less than 6% on average (Amata, 2022). Therefore, this study adopted theAuto Regressive Distributed Lag (ARDL) bounds test to determine how health spending affects life expectancy.

THEORETICAL FOUNDATIONAL

Health Production Theory

In his influential article "On the Concept of Health Capital and the Demand for Health" from the early 1970s, economist Michael Grossman developed the Health Production Theory. The theory's central tenet was that health could be considered a long-lasting capital asset producing healthy time. According to the Grossman model, people have a base level of health that declines with age but can be improved through investments, especially in activities related to their health (Ahonkhai *et al.,* 2023). This theory does not predict that health declines with lower socio-economic status, it does not make current behavior dependent on the past, it does not prevent someone from choosing to live forever, and it only forecasts future values of health capital, among other limitations. Despite these drawbacks, the extended growth and health production theories serve as the study's theoretical framework.

Keynesian Theory of Public Expenditure.

The cornerstone of Keynesian economics is the Keynesian theory of public expenditure, which British economist John Maynard Keynes created in the 1930s. In order to increase aggregate demand, promote economic growth, and maintain economic stability, this theory—also known as Keynesian fiscal policy—called for government intervention in the economy through an increase in public spending during economic downturns (Ahonkhai et al., 2023). According to Ilori *et al.* (2017), the Keynesian theory is relevant for explaining government health spending, which is crucial for enhancing health outcomes, particularly life expectancy. Keynesian theory hinged on the idea that government spending has a multiplier effect, which benefits the economy. While some have questioned the effectiveness of government health spending, claiming it can lead to inefficiency and resource waste, others have expressed concern that it may displace private investment in the economy. This theory applied to the current study because it supports the idea that health spending should extend wellness (life expectancy),- the primary focus of this study.

Empirical Review

Ahonkhai *et al.* (2023) used the autoregressive distributed lag model to examine the association between government health spending and health sector performance in Nigeria from 1981 to 2021. The analysis discovered that in Nigeria, corruption, health insurance, and medical consultants have a negative impact on life expectancy and a positive impact on infant mortality. However, government health domestic spending, income per capita, medical provider compensation, and international health grants positively impact life expectancy and have a negative impact on newborn mortality.

The effect of public and private health spending on life expectancy in Iran from 2000 to 2017 was examined by Shahraki (2019). His national descriptive-analytical study, which employed the vector error correction model, revealed a two-way causal relationship between public spending and life expectancy in both the short and long terms. Additionally, there was a causal link between private health spending and life expectancy, but the short- and long-term causal effects of life expectancy were absent. The years spent in school, income, and inflation influenced public and private health spending in Iran.

Ojo et al. (2020) examined the connection between health expenditure and life expectancy in Nigeria from 1981 to 2018. The study employed ARDL, and the result showed that government recurrent health expenditure had an insignificant and negative influence on life expectancy in Nigeria.

Owumi and Eboh (2021) used the least squares regression method to assess the impact of healthcare spending on life expectancy at birth in Nigeria from 2000 to 2017. The outcome demonstrated that for the period under consideration, domestic general government health expenditure, out-of-pocket spending, and external health expenditure had significantly positive effects on life expectancy in Nigeria.

Ezeani and Efobi (2018) examined the relationship between health spending and life expectancy in Nigeria from 1981 to 2015 using the ARDL model. Their research revealed that the short-run estimate for both government capital and recurrent spending on health was positive and not statistically significant,

suggesting that health spending has a delayed impact on life expectancy. Thus, in order to improve the health outcomes of Nigerians, the authors advise policymakers to make healthcare spending a top priority.
Olayiwola, Adedokun, and Olusanya (2020) investigated how government health spending in Nigeria from 1981 to 2019 affected health outcomes. The co-integration technique and the error correction model (ECM) analysis methods are available in the study. According to the study, raising government health spending led to higher life expectancy and decreased infant and maternal mortality rates. Environmental pollution and macroeconomic instability negatively impact life expectancy, infant mortality, and maternal mortality rates. Surprisingly, the research revealed a long-term link between government health spending, infant, maternal, and life expectancy mortality.
An empirical analysis of the effects of government health spending on Nigeria's health sector performance from 1979 to 2019 by Danladi (2021) showed that capital health expenditure and recurrent health expenditures are positively related to the performance of the health sector proxy as measured by life expectancy rate, but statistically insignificantly so. However, the relationship between capital health spending and life expectancy is statistically significant.
Nkemgha *et al.* (2021) examined the effect of healthcare spending on life expectancy in Cameroon from 1980 to 2014, using Toda and Yamamoto causality test and ordinary least squares (OLS) regression techniques. The findings indicated that while public health spending has a negligible effect on life expectancy in Cameroon, private health spending has a positive and significant impact. According to the results of the causality test, there is a bidirectional causal relationship between private health spending and life expectancy and a one-way relationship between life expectancy and public health spending.

METHODOLOGY

In order to examine the relationship between Nigeria's Health Expenditure and Life Expectancy, this study employs an ex-post facto research design and Nigerian annual time series from 1990 to 2022. Life Expectancy is the dependent variable, while Government Recurrent Expenditure on Health, Government Capital Expenditure on Health, Out of Pocket Expenditure on Health, and Secondary School enrolment were independent variables. Data were obtained from the Central Bank of Nigeria statistical bulletin and World Bank Indicators.

Model Specification

To provide empirical insight into Nigeria's Health Expenditure and Life Expectancy, Ezeani and Efobi's (2018) modified model was adapted to analyze the effect of health expenditure on life expectancy in Nigeria.
The explicit model for the study is given as:

LE = f (GREH, GCEH, OPEH, SCEN) ---------------------------------- 1

LE = β0 + β1 GREH + β2 GCEH+ β3 OPEH+ β4 SCEN + Et ---------------- 2

Where;

β1, β2, β3, β4 > 0

LE = Life Expectancy
GREH = Government Recurrent Expenditure on Health
GCEH = Government Capital Expenditure on Health
OPEH = Out-of-pocket Expenditure on Health
SCEN = Secondary School Enrolment

Model Estimation

The empirical investigation involves three steps. The first step examines the stationarity of the variables using the ADF unit root test. The second step is to test for the presence of long-run relationships between the variables. This study employed the Auto Regressive Distributed Lag (ARDL) bounds test procedure, which was developed by Pesaran and Pesaran (1997) and improved upon by Pesaran et al. (2001) for the estimation. Auto-regressive distributed lag has the advantage of being applied because it gives a better result for small sample data sets than other approaches.

The equation of the unrestricted Error Correction Model (ECM) is stated as:

$$\Delta LE_t = + \sum_{i=1}^{m} \beta_{1i}\, \Delta \mathrm{LE}_{t-1} + \sum_{i=0}^{m} \beta_{2i}\, \Delta \mathrm{GREH}_{t-1} + \sum_{i=0}^{m} \beta_{3i}\, \Delta \mathrm{GCEH}_{t-1} + \sum_{i=0}^{m} \beta_{4i}\, \Delta \mathrm{OPEH}_{t-1} + \sum_{i=0}^{m} \beta_{5i}\, \Delta \mathrm{SCEN}_{t-1} + ECT_{t-1} + E_t \,.\,.\,.\,.\,.\,.\,.\,.\quad (3)$$

Where Δ is the first difference of a variable, m is the maximum lag order, $\beta_1 \ldots B_5$ are short-run coefficients, $\varphi_1 \ldots \varphi_6$ represents the long-run dynamics, t is the time trend and e_t is the white noise error. Diagnostic tests comprising the Breusch-Godfrey Serial Correlation LM and Breusch-Pagan-Godfrey heteroskedasticity tests were carried out. Cumulative Sum of Recursive Residual (CUSUM) was applied to ascertain the stability of the ARDL estimates.

RESULTS AND ANALYSIS

Unit root test.

Table 1: Unit Root test results Summary using the ADF Procedure.

Variables	ADFTest Statistics	Critical Values	Order of Integration
LE	-2.960411	-3.220664	I (1)
OPEH	-2.960411	-11.06495	I (1)
SCEN	-2.957110	-3.629671	I (0)
GCEH	-2.960411	-8.124796	I (1)
GREH	-2.960411	-5.642515	I (1)

Note: The test includes both Trends and Intercepts at a 5% level of significance

Source: Own computations (E-Views output)

Table 1 presents the result of the stationarity test using the Augmented Dickey-Fuller test. The result revealed that SCENwas stationary at level, integrated at the order I(0). At the same time, the other variables, GCEH, GREH, OPEH, and LE, became stationary after the first difference; that is, they were integrated at the order I(1).

Since all the variables used for this analysis have a combination of I(0) and I(1), the ARDL bounds test was used to establish a short and long-run relationship among our variables of interest.

Table 2: ARDL Bounds Test for Co-integration Model

Test Statistic	Value	Significance	I(0)	I(1)
F-statistics	8.180590	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: *Computed Result Using (E-Views 12)*

Co-integration Test: From Table 4.2 above, the calculated F-statistic of the variables is 8.180590, which is higher than the upper bound critical value of 3.46 at the 5% level of significance using restricted intercept and no trend. This implies that the null hypothesis of no co-integration cannot be accepted at the 5% significance level. This confirms the existence of a long-run relationship among the variables of interest.

ARDL Long Run Result for the Estimated Model

Table 3: ARDL Long Run Result for the Estimated Model. Dependent Variable: LE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GREH	-0.014274	0.008802	-1.621622	0.1233
GCEH	0.000389	0.005682	0.068435	0.9462
OPEH	0.213404	0.087943	2.426616	0.0266
SCEN	2.782807	0.856722	3.248202	0.0047
C	14.560282	5.845021	2.491058	0.0234

Source: *Computed Result Using (E-Views 12)*

Table 4.3 above is the ARDL long-run result of the estimated model. The coefficient of Government recurrent expenditure on health (GREH) was negative and statistically insignificant at a 5% level, implying that an increase in Government recurrent expenditure on health will lessen Life Expectancy. This is consistent with the work of Ojo et al. (2020), who found that government recurrent health expenditure had an insignificant and negative influence on life expectancy in Nigeria.The coefficient of government capital expenditure on health (GCEN) was positive and statistically insignificant in the long run. In contrast, the coefficient of out-of-pocket expenditure on health (OPEH) and secondary school enrolment (SCEN) were positive and statistically significant.

ARDL Error Correction Model Estimates

Table 5:ARDL Error Correction Model Result for the Estimated Model

Dependent Variable: D(LE)				
Variable	**Coeff.**	**Std. Error**	**t-Statistic**	**Prob.**
D(GREH)	-0.000397	0.000719	-0.552575	0.5877
D(OPEH)	-0.007096	0.010133	-0.700270	0.4932
D(OPEH(-1))	-0.043676	0.012117	-3.604621	0.0022
D(OPEH(-2))	-0.028133	0.012383	-2.271998	0.0364
D(SCEN)	0.500197	0.158257	3.160660	0.0057
D(SCEN(-1))	-0.088243	0.165367	-0.533621	0.6005
D(SCEN(-2))	-0.551419	0.194624	-2.833253	0.0115
ECM(-1)*	-0.172231	0.021610	-7.969936	0.0000

Source: Computed Result Using (E-Views 12) R2 adj= 0.671220, DW = 1.854226

The parsimonious error correction model (ECM) result presented in Table 5 above is based on the ARDL (1, 1, 0, 3, 3) model, which revealed that Government recurrent expenditure on health after one lag period, was found to be negative and statistically insignificant in the short run.This implies that an increase in Government recurrent expenditure on health reduces life expectancy in the short run. This is not consistent with our *a priori expectation.* From the result, it is evident that the lack of essential healthcare services, poor staffing, poor distribution of health workers, meager quality of healthcare services,lack of essential drugs, brain drain phenomenon, and lack of state-of-the-arttechnology inthe healthcare sector. These factors are responsible for the negative relationship between Government recurrent expenditure on health and life expectancy.

Government capital expenditure on health did not influence life expectancy in the short run. This is due tounderdeveloped healthcare infrastructure, low budgetary allocation to the health sector, and lack of modern medical facilities. The country's healthcare indicators are some of the worst in Africa.

Out-of-pocket expenditure on health was negative and statistically insignificant in the short run, which is not similar to our *a priori expectation*.This means that an increase in out-of-pocket expenditure on health will reduce life expectancy in the short run. The World Health Organization (2022) reports that Nigeria's out-of-pocket spending on health stood at 77%, compared to the 37% average for Africa and 18% global average. With extensive universal health coverage for Nigerians, free health screening programs for the average and low-income earners, and improved Doctor-Patient ratio in government-owned hospitals, out-of-pocket expenditure on health will reduce significantly and, in turn, affect life expectancy positively.

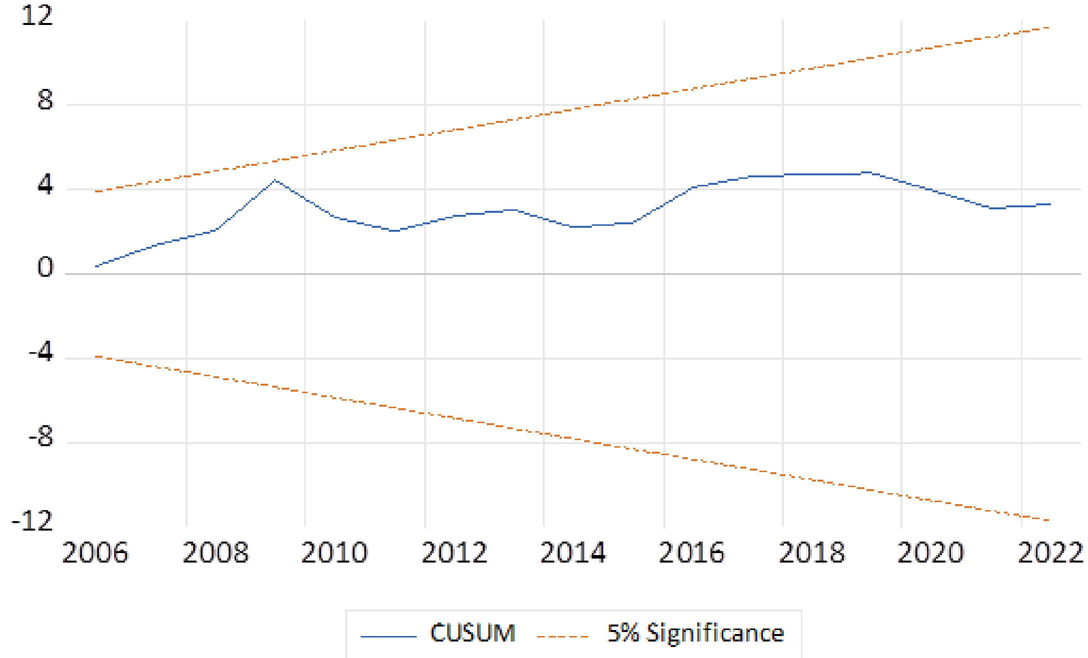
Secondary school enrollment was positive and statistically significant in the short run, which is consistent with our *a priori expectation,* indicating that an increase in secondary school enrollment is associated with an increase in life expectancy. This finding aligns with that of Olusoji *et al*. (2020).

The model's statistical fitness, exemplified by the Adjusted R-squared, stood at 0.671220, implying that 67.12% of the variation in Life Expectancyis explained by the combined effects of all the explanatory variables (Government Recurrent Expenditure on Health, Government Capital Expenditure on Health, Out of Pocket Expenditure on Healthand Secondary School Enrolment) used during the period ofthe study. This suggests that about 32.88 percent of the variation in Life Expectancy is accounted for by factors not captured in the model.

The result also shows that the ECT (-1) is negative and significant. The significance of ECT is evidence that causality runs in at least one direction. The ECT (-1) of -0.172231 is the speed of adjustment from the

short-run to the long-run equilibrium. This suggests that in the short-run disequilibrium or deviation, 17.223 percent of the adjustment to the long-run takes place within one period, either by market mechanism, government intervention, or both.

Figure 1: CUSUM Test of Stability



Source: Computed Using (E-Views 12)

The stability of the model's parameters was examined using the cumulative sum of recursive residuals (CUSUM). The CUSUM line did not spread beyond the 5 percent critical line, confirming the stability of the long-run and short-run coefficients of the exogenous variables on Life Expectancy during the period covered by the study.

Table 4.6 Breusch-Godfrey Serial Correlation LM Test:

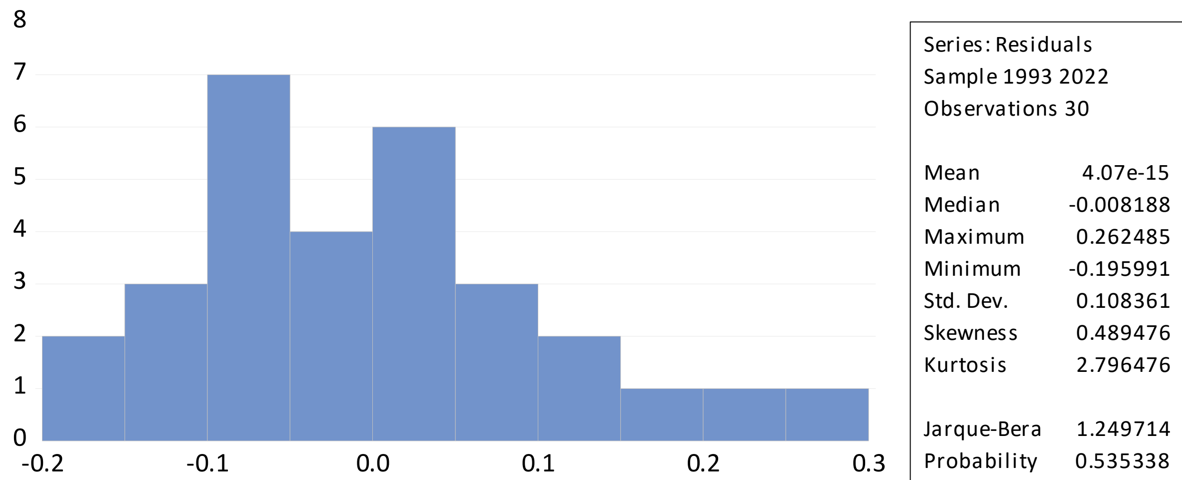
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.030593	Prob. F(2,15)	0.9699
Obs*R-squared	0.121876	Prob. Chi-Square(2)	0.9409

Source: Computed Using (E-Views 12)

Table 6above presents the result of the Breusch-Godfrey test for autocorrelation from the value of the prob. With a Chi-Square of 0.9409, we cannot reject the null hypothesis of no autocorrelation, which is desirable in the model. This indicates the absence of autocorrelation in the model.

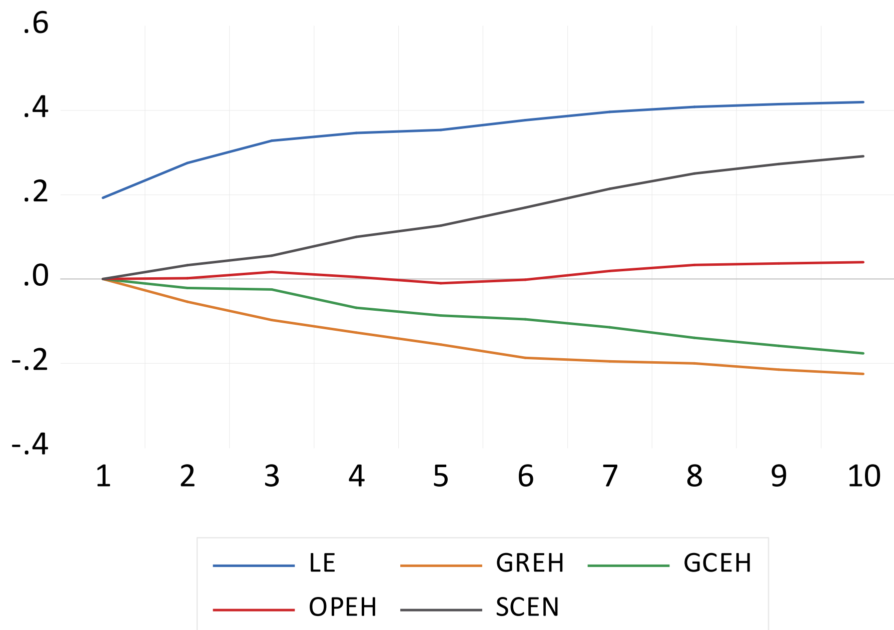
Figure 2. Normality Test.



Source: Computed Using (E-Views 12)

The Jarque-Bera normality test result showed that the model scaled through the diagnostic tests as the probability value of 0.506 was greater than 0.05, implying that the null hypotheses of the normal distribution are not rejected, implying that the estimated parameters are stable over time and can therefore be used for the consistent forecast.

Figure 3. Graphical Presentation



CONCLUSION

The ARDL bounds test was used in this study to examine the relationship between Nigeria's health expenditure and life expectancy from 1999 to 2022, employing time series data from the Central Bank of Nigeria's Statistical Bulletin and World Bank Indicators. The variables were subjected to unit root test using the ADF. The test result revealed that secondary school enrolmentwas stationary at level, that is, integrated at the order I(0), while the other variables, government recurrent expenditure on health, government capital expenditure on health, out-of-pocket expenditure on health, and life expectancy

became stationary after the first difference, that is, they were integrated at the order I(1). The bounds test confirmed the existence of a long-run association among the variables in the model. In the long run, government recurrent expenditure on health (GREH) and government capital expenditure on health (GCEH) negatively influenced life expectancy, while out-of-pocket expenditure on health and life expectancy positively impacted life expectancy. In the short run, Secondary School enrollment maintained a positive relationship with Life Expectancy, while government recurrent expenditure on health, government capital expenditure on health, and out-of-pocket expenditure on health exerted a negative relationship with Life expectancy.

Therefore, we

- ❖ recommend that the Nigerian Government adopt a multi-layered approach to address the negative relationship between government capital expenditure on health and life expectancy. This approach should include increased budgetary allocation for capital projects to the health sector, incorporating more state-of-the-art technology into the health sector, and improving the transparency and accountability of healthcare spending.
- ❖ Also, for government recurrent expenditure on health to have a more immediate impact, the Nigerian Government should focus on better welfare packages for health workers as this will reduce the brain drain currently faced in the health sector. Essential drugs should made readily available in health facilities across the nation.
- ❖ In addition, as a matter of urgency, the Nigerian government should provide extensive universal health coverage for Nigerians and free health screening programs for the average and low-income earners. This will help reduce Nigeria's out-of-pocket health expenditure, which is around 77% and one of the highest in Africa.
- ❖ Government should put more effort into reducing the percentage of out-of-school children; it will help create better sensitization and awareness of healthy living conditions.

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IMPACT OF DIRECT TAXATION ON ECONOMIC GROWTH OF NIGERIA

[1]Uzochukwu, Ezekwere and [2]Agari Evi Prosper
[1]Department of Accounting, Kingsley Ozumba Mbadiwe University, Ideato Imo state.
[2]Department of Business Administration and Management, Federal Polytechnic, Orogun, Delta State
Corresponding author: uzockukwu.ezekwere@komu.edu.ng

ABSTRACT
The study ascertained the effect of direct tax on gross domestic product in Nigeria; it specifically evaluates how company income tax and capital gain tax affect gross domestic product in Nigeria. *Ex Post Facto* research design was adopted. This study used existing (published) available data on taxation in Nigeria from 2001 to 2021 using time series data based on data availability. Secondary data were sourced from the financial statistical bulletin, CBN statistical bulletin, and the Nigeria Securities Exchange. The data were analyzed using descriptive statistics and regression techniques. A unit trust test was employed to determine if the trending data should be first differenced or regressed on deterministic functions of time to render the data stationary, and a co-integration test was used to establish if there is a correlation between time series in the long term. Results show no statistically significant effect between company income tax and capital gain tax and gross domestic product in Nigeria. The study recommends improving the administration of company income tax to reduce evasion and avoidance. The policies of company income tax should be reviewed to block the loopholes that encourage tax avoidance, which most companies capitalize on to avoid tax. In addition, the government should provide the enabling environment needed to support domestic and foreign investment to attract more capital gain that will boost taxable income, thereby improving the country's economic growth.
Keywords: Direct Taxation, Company income tax, Capital gain tax and GDP

INTRODUCTION

Taxation remains one of the most effective tools to stabilize an economy and ensure equal income redistribution. Nowadays, taxes are applied to sanitize the production of goods and services to guarantee the health and overall well-being of people in the economy. Recently, countries have struggled to levy large taxes to raise higher revenue and finance their ever-increasing demand for publicly produced goods and services. However, taxpayers (including households and firms) perceive taxes as a burden. This negative attitude toward tax payments leads to tax evasion and tax avoidance, which directly undermines the share of tax revenue (Alm, 2018; Antinyan *et al.,* 2020). This trend has prompted some countries to introduce tax motivation packages such as improvement in government service delivery, trust, and power to reduce tax avoidance and improve the share of tax revenue (Gangl *et al.,* 2020).

There is no doubt that Nigeria as a country-state may not be able to survive with the revenue from the sales of oil (Ogbonna, 2009). As a result, Nigeria's revenue is subject to the unstable price of oil, which is affected by the forces of supply and demand in the world market. Recently, there has been a fall in the price of oil, resulting in a decline in the country's revenue capacity; hence, the government is unable to discharge its responsibilities and further allocate revenues to the state government for the well-being of the citizens and the state at large. To survive, the state governments resorted to an alternative means of sourcing revenues for the state by falling back to internal sources of revenue. The revenue shortfall has continued to motivate the government at all levels to create alternative means of raising funds.

Tax non-compliance, in the form of tax avoidance and evasion, is still pervasive across developed and developing countries despite tough penalties imposed on the culprits. Naturally, there is a group of actors who find it duty-bound to duly pay all their taxes without being coerced by the law (Slemrod, 2017); however, their number might decrease over time as they notice that their counterparts successfully get away without punishment. Tax non-compliance is a significant threat to any economy since it diminishes the capacity of the government to provide public goods and services. In addition, it makes fiscal policy instruments less effective in managing the macroeconomic environment.

Despite the contribution that taxation can make towards the gross domestic product (GDP) of a country in general, much attention also needs to be given to the side effects of a tax on the growth of significant firms and Small and Medium Scale Enterprises (SMEs). This is because SMEs are crucial in driving economic growth in developing and developed countries. As highlighted, they generate more new jobs than large firms or micro-enterprises and introduce innovative ideas, products, and business methods (Baurer, 2015).

Therefore, the current study investigates the effect of the direct tax system on Nigeria's economic growth by examining how company income tax and capital gain tax affect GDP.

REVIEW OF LITERATURE

Economic growth is an increase in the production of economic goods and services, compared from one time to another. It can be measured in nominal or real (adjusted for inflation) terms. Economic growth and development are backed by some theoretical frameworks, one of which is the Harrod-Domar model, developed independently by Sir. Roy Harrod in 1939 and Evsey in 1946 are models that make evident the rate of economic growth in an economy; however, the emergence of economic growth and development theories can be traced back to Adams Smith's Wealth of Nations. Adams Smith opines that the wealth of a nation depends on the division of labour and is limited by the limits of the division of labour. However, a later postulation by Richardo, Malthus and Mill took definite shapes in correcting Adam Smith's exposition with further analyses, which took a decade and eventually surpassed the Smithian view. The concept of taxation has been viewed by academies differently, though pointing toward the same direction; Wambai and Hanga (2013) opine that taxation is a compulsory levy by the government through its agent on the profits, income, or consumption of its subjects or citizens. It is a compulsory contribution made by individuals and organizations towards defraying the government's expenditures (Dandago & Alabede, 2001). It plays a significant role in the economic life of a developing country. Today, Nigeria is indeed in dire need of an effective and efficient tax system in order to generate enough revenue that will stimulate economic growth (Oji, 2000)

Concept of Direct tax

A direct tax is paid directly by an individual or an organization. The ability-to-pay principle governs direct taxes and revolves around an economic principle that those with more resources or a higher income should pay more taxes, leading to wealth redistribution. Direct taxes cannot be passed on to another person or entity; the individual or organization levied with the tax is responsible for the full tax payment. A direct tax is the inverse of an indirect tax, in which the tax is imposed on one entity, such as a seller, and paid for by another. Nigeria has several types of direct taxes, including corporate income tax, petroleum profit tax, personal income tax, and education tax.

Company Income Tax

The government imposes a Company income tax on the income and profits of companies operating in the country. The Companies Income Tax Act governs the administration of Companies Income Tax and was first enacted in 1961. It has undergone so many amendments, the latest being in April 2007. Companies Income Tax (CIT) is a tax on the profits of registered companies in Nigeria. It also includes the tax on the profits of foreign companies carrying on business in Nigeria, including limited liability companies and public limited liability companies. It is, therefore, commonly referred to as the corporate tax (Onyeyiri, 2019). According to Taiwo *et al.* (2019), company Income Tax (CIT) is a tax on the profits of incorporated entities in Nigeria. It includes the tax on the profits of non-resident companies in Nigeria. The tax is paid by limited liability companies, including public limited liability companies, and is commonly called corporate tax. CIT was created by the Companies Income Tax Act (CITA) of 1979 and has its roots in the Income Tax Management Act of 1961. It is one of the taxes administered and collected by the Federal Inland Revenue Service ('FIRS' or 'the Service') and has contributed significantly to the revenue profile of the Service. Company Income Tax (CIT) is governed by the Companies Income Tax Act (CITA), Cap C21, LFN 2004 (as amended), with a rate of 30% of the total profit of a company. Some profits are exempted from CIT provided they are not derived from trade or business activities carried out by the company (e.g., Cooperative Society). The rate is 30% of total profit for income tax and 2% of assessable profit for education tax. Total profit is after deducting the previous year's losses carried forward and capital allowances. Assessable profit is obtained prior to deducting capital allowances. Resident companies are incorporated under the Companies and Allied Matters Act (CAMA) 2004. The administration of the Companies Income Tax is vested in the Federal Inland Revenue Service, which used to be known as the Federal Board of Inland Revenue (FBIR) until the enactment of the Federal Inland Revenue Establishment Act in April 2007, which scrapped the FBIR and replaced it with Federal Inland Revenue Service (Pwc, 2019).

According to Joseph and Omodero (2020), every company shall pay a provisional tax three months from the beginning of each assessment year, equal to the tax paid in the previous assessment year. The due date for filing returns for newly incorporated companies is within eighteen months from the date of incorporation or not later than six months after its accounting period, whichever is earlier. However, for

existing companies, the due date for filing returns is within six months from the end of the accounting year. Companies operating for more than four years are liable to minimum tax except those specifically exempted by the tax law. Moreover, Onoja and Ibrahim (2020) submitted that the Minimum Tax under CITA arises when a company makes a loss, has no tax payable, and is less than the minimum tax. In 2016, the revenue target for Companies Income Tax in Nigeria was N1.877 trillion, representing approximately 40% of the total projected tax revenue of N4.957 trillion for that fiscal year (Akhor & Ekundayo, 2016).

Capital Gains Tax

The capital gains tax is levied on the profit from an investment that is incurred when the investment is sold (Investopedia, 2022). When stock shares or any other taxable investment assets are sold, the capital gains, or profits, are referred to as having been "realized." The tax does not apply to unsold investments or "unrealized capital gains." Stock shares will not incur taxes until sold, no matter how long the shares are held or how much they increase in value.

Capital Gains Tax (CGT) Act, Cap C1 LFN 2004 (as amended) governs the capital gains tax. According to Karumba (2016), Capital Gains Tax is charged at a flat rate of 10% of chargeable gains. Accordingly, all chargeable assets are subject to Capital Gains Tax when disposed at a gain, except those specifically exempted by the Act. More so, chargeable assets include all forms of property, whether or not they are situated in Nigeria. The due date for filing returns and tax payments is the same as in Companies Income Tax (Edewusi & Ajayi, 2019). Lyndon and Paymaster (2016) stated that allowable expenditure for CGT includes fees, commissions or remunerations paid for professional services and the transfer cost. Gains exempted from CGT include those arising from the disposal of decorations awarded for valour and gallant conduct, life insurance policy, Nigerian government securities, stock and shares. Gains shall not be chargeable if they accrue to some organizations, provided the gain is not derived from any disposal of any asset acquired in connection with any trade carried on by the organization, e.g. An ecclesiastical, charitable or educational institution of a public character, Statutory registered friendly society, Cooperative Society registered under Cooperative Societies Law of any State, Trade Union registered under the Trade Unions Act (Akhor & Ekundayo, 2016).

Empirical Studies

Nweze *et al.* (2021) ascertained the effect of tax revenue on Nigeria's per capita income from 2000 to 2019. This study employed time series data and adopted an Ex-post facto research design. Secondary data were sourced from the Central Bank of Nigeria (CBN), Statistical Bulletin, Federal Inland Revenue Service (FIRS), World Bank Statistical Bulletin and Annual Abstract of Statistics from the National Bureau of Statistics (NBS). Descriptive statistics were utilized for the study variables, while Ordinary Least Square (OLS) regression analysis was used to test the hypothesis. The study found that tax revenue significantly positively affects Nigeria's per capita income. Ezejiofor *et al.* (2021) assessed tax revenue on per capita income in Nigeria. *Ex-post Facto* research design was adopted. The population constituted the Nigerian economy, and data for this study were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and Federal Inland Revenue Service (FIRS). The extracted variables are Per Capita Income (PCI) and customs and excise duties. The data analysis for this study was done based on the data collected from publications and statistical bulletins of CBN, FIRS and NBS. Correlation and Ordinary Least Square (OLS) regressions were used in testing the hypothesis. Data analysis revealed that customs and excise duties negatively affect Nigeria's per capita income. Olaoye and Ayeni (2019) examined the price-introduced tax and customs duties on revenue generation in Nigeria. Secondary data had been sourced from the Federal Inland Revenue Service (FIRS), ranging from 2000 to 2016. Autoregressive Distributed Lag (ARDL) and Granger causality exams were used as the estimation techniques. The findings of the study published that the F-statistics value was once 2.883868, which is lesser than both the lower bound and the top specific values of 3.79 and 4.85, respectively, at the 5 per cent level of significance, which implies that there is no long-run relationship among value-added tax, customs obligations and revenue generation. It used to be equally revealed that there is no causality among value-added tax, customs duties, and income generation. The study concluded that value-added tax and customs duties have no considerable effect on the revenue era, and there is no long-run relationship among value-added tax, customs responsibilities and revenue era in Nigeria for the duration of the learn-about period.

Omondi (2019) analyzed the effect of customs and exercise responsibilities on Kenya's economic boom from 1973 to 2010. Two developments influenced the study. First, with the aid of the inconsistency in existing empirical studies and, secondly, by the extensive understanding hole occasioned through the paucity of empirical literature on Kenya. Therefore, the study tried reconciling the different positions and

closing the understanding gap. The study adopted a correlation lookup graph based on its potential to decide the electricity and direction of relationships between variables whilst the theoretical framework used to be anchored on the endogenous boom model. The empirical outcomes indicated that custom and excise obligations positively correlate with the monetary boom in Kenya. Ironkwe and Agu (2019) analyzed the relationship between complete tax income and monetary growth in Nigeria. Time sequence information on exclusive sorts of complete tax revenue and economic improvement from 1986-2016 was accrued from the Central Bank of Nigeria statistical bulletin, Federal Inland Revenue Service and National Bureau of Statistics. Multiple regression analysis was once used in analyzing the facts with the valuable resource of STATA version thirteen. The results indicated a sizeable high-quality relationship between all tax revenue and unemployment in Nigeria; agency earnings tax has no widespread relationship with monetary growth. The study concluded that total tax revenue relates positively to unemployment and recommends that the government distribute its social welfare programmes in such a way as to supply direct benefits to taxpayers. This makes them trust that the component of their tough-earned cash, paid for purposes, is being efficaciously utilized through the government. The tax official wishes for improvement through enough education and the provision of suitable working materials and facilities. Neway *et al.* (2018) recognized determinants of tax income in Ethiopia by using secondary information and a couple of variable regression mannequin using the OLS method. Quantitative research techniques were used on time collection facts set for 1999/00 to 2015/16. Both descriptive records and econometric equipment were employed to analyze and present the data collected from involved bodies. The finding revealed that industry sector share to GDP, per capita income, and exchange openness as measured by the share of export and import to GDP significantly affect tax revenue. In contrast, the agriculture region's share of GDP and annual price of inflation have substantial and bad impacts on tax revenue as measured by using the share of tax income to GDP. Gbegi *et al.* (2017) examined the effect of petroleum profit tax (PPT) on the profitability of oil and fuel companies in Nigeria; in line with the objectives of the study, secondary facts were obtained from the economic announcements of ten (10) selected oil and fuel company protecting the duration of 2011 to 2015. Panel statistics have been deployed, and descriptive records and multiple regression methods have been employed to establish the effect of the PPT rate on the profitability of oil and gasoline firms. The study revealed that taxes paid through oil and gasoline industries have a downward impact on the profitability of oil and gas industries. Okoh et al. (2016) examined the effect of petroleum profit tax on Nigeria's economic growth. Income from petroleum taxes is the proxy for PPT, while economic growth was measured using gross domestic product (GDP). The research adopted expos-facto research. Data were sourced from the Central Bank of Nigeria Statistical Bulletin and the Federal Statistical Bureau. The study covered a twelve-year period (2004-2015). Time series data were analyzed using simple linear regression. The results reveal that PPT positively and significantly affected Nigeria's GDP. Cornelius *et al.* (2016) examined the impact of tax income on the Nigerian economy from 1990-2014. The objectives of the study were to look at the relationship between petroleum earnings tax and the Nigerian economy, the effect of organization profits tax on the Nigerian financial system and the effectiveness of non-oil revenue on the Nigerian economy. Data have been sourced from the Central Bank Statistical Bulletin and extracted through the desk survey method. Ordinary least squares of more than one regression model used to be used to establish the relationship between dependent and independent variables. The finding revealed a substantial relationship between petroleum income tax and the increase in the Nigerian economy. It showed a massive relationship between non-oil revenue and the growth of the Nigerian economy. The finding also published that there is no considerable relationship between corporation income tax and the increase in the Nigerian economy. It was recommended that authorities endeavour to supply social facilities to all nooks and crannies of the country. Ogbonna and Odoemelam (2015) investigated taxation's influence on Nigeria's financial improvement proxied with the aid of the gross domestic product (GDP). The study also examined the relation between groups income tax (CIT), petroleum income tax (PPT) and gross home product in post-IFRS period. Secondary data have been sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin, Federal Inland Revenue Services (FIRS) and different applicable authority agencies for the duration covered in the study, 2000-2013. The facts were analyzed using descriptive statistics and an econometric model with the aid of SPSS model 20. The effects showed a robust and positive relationship between financial improvement and Tax variables used. It additionally documented a decline in tax revenue in –the IFRS period. The study similarly printed upward push and fall in tax income and monetary improvement occasioned by corruption, tax evasion, the 2008 financial meltdown, dysfunctionalities in the earnings tax system, loopholes in tax laws and inefficient tax administration.

Theoretical Framework

This study is anchored on Endogenous Growth Theory. Endogenous growth theory, developed by economist Paul Romer, emerged in the 1980s as an alternative to the neoclassical growth theory. It is an economic theory which argues that economic growth is generated from within a system as a direct result of internal processes. More specifically, the theory notes that the enhancement of a nation's human capital will lead to economic growth using the development of new forms of technology and efficient and effective means of production; it questions how gaps in wealth between developed and underdeveloped countries could persist if investment in physical capital like infrastructure is subject to diminishing returns.

Economist Paul Romer argued that technological change is not just an exogenous byproduct of independent scientific developments. He sought to prove that government policies, including investment in R&D and intellectual property laws, helped foster endogenous innovation and fuel persistent economic growth. The endogenous growth theory offered a fresh perspective on what engineers economic growth. It argued that a persistent rate of prosperity is influenced by internal processes such as human capital, innovation, and investment capital rather than external, uncontrollable forces, challenging the view of neoclassical economics. Endogenous growth economists believe that productivity improvements can be tied directly to faster innovation and more investments in human capital. As such, they advocate for government and private sector institutions to nurture innovation initiatives and offer incentives for individuals and businesses to be more creative, such as research and development (R&D) funding and intellectual property rights.

In a knowledge-based economy, the spillover effects from investment in technology and people keep generating returns. Influential knowledge-based sectors, such as telecommunications, software, and other high-tech industries, play a vital role here. The central tenets of endogenous growth theory include government policy's ability to raise a country's growth rate if it leads to more intense market competition and helps stimulate product and process innovation. Also, government policy should encourage entrepreneurship to create new businesses and ultimately as an essential source of new jobs, investment, and further innovation.

Subsidies for research and development or education increase the growth rate in some endogenous growth models by increasing the incentive for innovation (Romer, 1994). In the mid-1980s, growth theorists became increasingly dissatisfied with standard accounts of exogenous factors determining long-run growth. They favoured a model that replaced the exogenous growth variable with a model in which the critical determinants of growth were explicit in the model. Lucas (1988), Rebelo (1991) and Ortigueira & Santos (1997) omitted technological change; instead, growth in these models is due to indefinite investment in human capital, which had a spillover effect on the economy and reduces the diminishing return to capital accumulation (Barro & Sala-i-Martin, 2004).

The AK model, the simplest endogenous model, gives a constant savings rate of endogenous growth and assumes a constant, exogenous saving rate. It models technological progress with a single parameter (usually A). It assumes that the production function does not exhibit diminishing returns to scale to lead to endogenous growth. Various rationales for this assumption have been given, such as positive spillovers from capital investment to the economy or technological improvements leading to further improvements. However, the endogenous growth theory is further supported by models in which agents optimally determine consumption and saving, optimizing the resource allocation to research and development, leading to technological progress (Fadare, 2010; Carroll, 2011).

The AK model production function is a special case of a Cobb–Douglas production function:

$$Y = AK^{\alpha}L^{1-\alpha}$$

This equation shows a Cobb–Douglas function where *Y* represents the total production in an economy. *A* represents total factor productivity, *K* is capital, *L* is labour, and the parameter α measures the output elasticity of capital. For the special case in which $\alpha = 1$, the production function becomes linear in capital, thereby giving constant returns to scale.

$$Y = AK$$

In neo-classical growth models, the long-run growth rate is exogenously determined by either the savings rate (the Harrod–Domar model) or the rate of technical progress (Solow model). However, the savings rate and rate of technological progress remain unexplained. Endogenous growth theory tries to overcome this shortcoming by building macroeconomic models from microeconomic foundations. Households are assumed to maximize utility subject to budget constraints, while firms maximize profits. Crucial importance is usually given to producing new technologies and human capital. The engine for growth can be as simple as a constant return to scale production function (the AK model) or more complicated setups

with spillover effects (spillovers are positive externalities, benefits that are attributed to costs from other firms), increasing numbers of goods, and increasing qualities (Acemoglu, 2009). Often, endogenous growth theory assumes a constant marginal product of capital at the aggregate level, or at least the limit of the marginal product of capital does not tend towards zero. This does not imply that larger firms will be more productive than small ones because, at the firm level, the marginal product of capital is still diminishing. Therefore, it is possible to construct endogenous growth models with perfect competition. However, in many endogenous growth models, the assumption of perfect competition is relaxed, and some degree of monopoly power is thought to exist. Generally, monopoly power in these models comes from the holding of patents. These are models with two sectors: producers of final output and an R&D sector. The R&D sector develops ideas that they are granted a monopoly power. R&D firms are assumed to be able to make monopoly profits by selling ideas to production firms, but the free entry condition means that these profits are dissipated on R&D spending (Romer, 2011).

Value Relevance of Endogenous Growth Theory

Endogenous growth theory is relevant to this study because it attempts to explain the process of long-run economic development through endogenous forces such as human capital, knowledge spillover and information technology. An endogenous growth theory implication is that policies embracing openness, competition, change and innovation promote growth. Conversely, policies that restrict or slow change by protecting or favouring particular existing industries or firms are likely, over time, to slow growth to the community's disadvantage. According to Howitt (2007), sustained economic growth is everywhere and always a process of continual transformation.

This study anchored on this theory in that it dwelled more on the economic progress enjoyed by the wealthiest nations since the Industrial Revolution, which would not have been possible if people had not undergone wrenching changes through various tax systems and reforms. Economies that cease to transform themselves are destined to fall off the path of economic growth. The countries that most deserve the title of "developing" are not the world's poorest but the richest. They need to engage in the never-ending process of economic development if they are to enjoy continued prosperity.

METHODOLOGY

The researchers adopted the *Ex-post facto* research design and used Time series data from 2001 to 2021 taxation data in Nigeria. The researcher codified the data into the following categories: economic growth (EG), gross domestic product (GDP), Company income tax (CIT) and capital gain tax (CGT), and analyzed them using a multi-linear regression. This type of regression is used to identify potential predictors of a particular outcome and to quantify the strength of the relationship between each predictor and the outcome**)** will be used in the study to compare and contrast the effect of the tax system on economic growth. Furthermore, a unit trust test was employed to determine if the trending data should be first differenced or regressed on deterministic functions of time to render the data stationary, and a co-integration test was to establish if there is a correlation between time series in the long-term.

Model Specification

In this study, the dependent variable is economic growth, while the tax system in Africa (TAS) is the independent variable. The dependent variable, which is economic growth, was proxied with Gross Domestic Product (GDP), while the independent variables were proxied with CIT (Corporate income tax) and capital gain tax (CGT). This study modified the functional relationship between tax revenue and the economic growth of the Nigeria model by Ojong et al. (2016). The model is expressed thus:

GDP = F (PPT, C1T, NOR)

Therefore, the modified model will be presented as follows;

$Y=f(X_1 \ldots\ldots X_5)$

ECG =*f*(TXS)

RGDP = f (CGT & CIT,)

Where

ECG = Economic Growth (Measure with GDP)

TXS = Direct Tax system (CIT and CGT)

$RGDP = \beta 0 + \beta_1 CIT + \beta_2 CGT + et$ - - - - - - - i

Where;

RGDP =Real Gross domestic product

CIT=Company Income tax

CGT = Capital gain tax

β0 = constant
et = Stochastic error
Decision rule:
The accept/reject criterion will be based on the p-value, and the alternative hypothesis will be accepted. If p-value > 0.05, otherwise reject and accept the null hypothesis.

DATA ANALYSIS AND RESULTS

Table 1 Descriptive Statistics

NIGERIA	GDPN	CITY	CGTN
Mean	327.7599	441976.7	19.83550
Median	368.6050	311622.4	12.92000
Maximum	546.6800	1408434.	99.40000
Minimum	74.03000	40.32000	2.270000
Std. Dev.	146.5036	484611.0	22.59153
Skewness	-0.422145	0.434392	2.329201
Kurtosis	1.945802	1.782706	8.745434
Jarque-Bera	1.520132	1.863824	45.59227
Probability	0.467635	0.393800	0.000000
Sum	6555.197	8839535.	396.7100
Sum Sq. Dev.	407803.0	4.46E+12	9697.164
Observations	21	21	21

Source: E-views 9 (2022)

Table 1 shows that the mean values of the economic growth proxy (GDP) stood at 327.760 in Nigeria. Furthermore, Nigeria's mean value of company income tax (CIT) was 441976. On the capital gain tax, the average value is 19.83550 in Nigeria. On the Jarque–Bera test of goodness-of-fit, the result suggested that only the data on firm liquidity in the Nigerian sample followed a normal distribution. However, the departure from the normality of the other variables did not pose any major problem in the panel data since the Central Limit Theorem revealed that the violation of the normality assumption posed no major problem in panel data analysis, especially with large firm-year observations (Ghasem & Zahediasl, 2012).

Unit Root Test

This pre-regression analysis assumes that the means and variances of these variables being tested are constant over time. Variables whose means and variances change over time are known as non-stationary or unit root variables. Therefore, incorporating non-stationary or unit root variables in estimating the regression equations using the Ordinary Least Square regression technique gives misleading inferences. Instead, if variables are non-stationary, the estimation of a long-run relationship between those variables should be based on the co-integration method. Since the testing of the unit-roots of a series is a precondition to the existence of the co-integration relationship, the Dickey-Fuller (1979), test is widely used to test for stationarity. The researcher employs the Dickey-Fuller (1979) test for Unit Root, and the results are presented below:

Table 2 Unit Root Test Result

H0: There is no Stationarity					
At Levels-I(0)			**Interpolated Dickey-Fuller Critical Values**		
Variables	**DF t-statistics**	**MacKinnon p-value**	**1%**	**5%**	**Decision**
Gross Domestic Product	-1.798057	0.3705	-3.808546	-3.020686	Accept H0
Company Income Tax.	-1.582105	0.4729	-3.808546	-3.020686	Accept H0
Capital Gain Tax	-4.057596	0.0059	-3.808546	-3.020686	Reject H0
At 1st difference - I(1)					
Gross Domestic Product	-2.972327	0.0558	-3.808546	-3.020686	Accept H0
Company Income Tax.	-4.707215	0.0016	-3.808546	-3.020686	Reject H0
Capital Gain Tax	-6.840442	0.0000	-3.808546	-3.020686	Reject H0

Table 3a: Dickey-Fuller (DF) Test for Stationarity

Source: Author's compilation 2023 from E-view 9.0 Output (Appendix 11)

In testing for time series properties of the variables in the model, we performed a univariate regression analysis using conventional Dickey-Fuller Unit Root Tests to ascertain whether each of these variables has a unit root (non-stationary) or does not have a unit root (stationary series). Following the summary results of the unit root tests presented in Table 2 above, it is clearly shown that the variables considered in the study are a mixture of stationary at levels {I(0)} and at difference {I(1)} series. Therefore, given this scenario, there is a need to test for the presence of a long-run relationship among the variables in the model, which the ARDL regression technique can capture.

Test of Hypotheses

Table 3: The Summary of Regression Analysis between CIT, CGT and GDP

Nigeria			
Variables	**Coefficient**	**t-Statistic**	**Prob.**
C	269770.5	2.959493	0.0103
CIT	0.215001	1.690136	0.1131
CGT	-1.454733	-1.768773	0.0987
R^2			0.8350
AR^2			0.7760
F-stat(p-value)			0.0000
D W			0.9995

Source: E-views 9 (2023)

The two hypotheses formulated in this study were tested in Table 3; the study adopted the one typical value of the test of significance (5%). The decision rule is to accept H_O (null hypothesis) when the probability value exceeds the typical significance test value of 0.05,

Considering the analysis, there was the need to particularize the findings by testing the hypotheses. Thus, the two hypotheses were further split to accommodate the sample as re-stated and tested below separately:

Hypothesis One

H_{01}: There is no significant effect of company income tax on the gross domestic product in Nigeria.

The first hypothesis of this study stated that company income tax has no significant impact on economic growth in Nigeria. The evidence provided by the regression result of Nigeria showed that the variable of gross domestic product had a positive coefficient of 0.215001, t-statistics of 1.690136 and a p-value of 0.1131, which was not significant at the 5% level. It meant that all H_{o1} was accepted as there was no statistically significant effect between company income tax and gross domestic product in Nigeria.

Hypothesis Two

H_{02}: There is no significant effect of capital gain tax on the gross domestic product in Nigeria.

The fourth hypothesis of this study stated that capital gain tax has no significant effect on gross domestic product in Nigeria. The evidence provided by the regression result of Nigeria showed that the variable of capital gain tax had a negative coefficient of -1.455, t-statistics of -1.769 and a p-value of 0.099, which was not significant at the 5% level; also, It meant that null hypothesis was accepted as there was no statistically significant effect between capital gain tax and gross domestic product in Nigeria.

CONCLUSION AND RECOMMENDATIONS

As observed from the hypothesis one test, the null hypothesis that company income tax had a positive insignificant relationship with gross domestic product was rejected. Despite the variable of company income tax not being statistically significant as projected, the coefficient sign varied among the samples. The outcome of the result supported the results of most prior studies, including those by Asaolu *et al.* (2018), which showed that CIT has a bad substantial relationship with financial growth Onakoya *et al.* (2016) result revealed a significant positive relationship between Company Income tax and economic growth.

From the result and testing of hypothesis two, it could be observed that the second null hypothesis, which stated that capital gain tax, had no significant relationship with gross domestic product in Nigeria. Nigeria had a negative effect/coefficient. However, Nigeria showed that the variable of capital gain tax had an insignificant effect.

Conclusively, the outcome of the analysis indicates that while the increase in value-added tax led to economic growth, other direct taxes (company income tax**)** were in the opposite direction. As Nigerian tax

variables revealed insignificant, this, however, creates income effects that reduce the need to engage in productive economic activity in Nigeria, and they may subsidize old capital, which provides windfall gains to asset holders that undermine incentives for new activity.

i. Based on the findings, we recommend that CIT administration be improved, focusing on reducing evasion and avoidance. The policies of company income tax should be reviewed to block the loopholes that encourage tax avoidance, which most companies capitalize on to avoid tax to enhance economic growth in Nigeria.
ii. The study recommends that the government should provide the necessary enabling environment needed to support both domestic and foreign investment so they can attract more capital gain that will boost taxable income and improve the country's economic growth.

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CAUSAL RELATIONSHIP BETWEEN HUMAN CAPITAL INVESTMENT AND ECONOMIC GROWTH IN EMERGING ECONOMIES: EVIDENCE FROM NIGERIA

[1]Onyendi, Hilary U., [2]Alamba, C. S., [1]Onyele, K. O., and [3]Onuba, Chinwe O.
[1]Department of Banking and Finance, [2]Department of Business Administration, [3]Department of Industrial Relations and Personnel Management,
Michael Okpara University of Agriculture Umudike.
Corresponding author: hilluch2008@yahoo.com

ABSTRACT
The study investigated the causal relationship between investment in human capital and economic development in emerging economies in general and Nigeria in particular for the period spanning from 1981 to 2022. The causality between human capital investment and economic growth has generated much inconclusive debate on which drives the other. Human capital investment increases productivity, capital formation, and capital stock, thereby stimulating economic growth; also, economic growth is an anchor and catalyst for effective and efficient human capital through the provision of qualitative, advanced, and sophisticated social and economic services for the population and labor force at little or no costs. However, in most emerging economies, including Nigeria, it is yet to be ascertained if human capital investment drives economic growth or vice versa. This study is set to ascertain this. The data source is secondary and obtained from the Statistical Bulletin of the Central Bank of Nigeria on various issues. Both descriptive and econometric tools were adopted. The descriptive tools include the mean, median, and standard deviation. The econometric tools used are the unit root tests, the Johansen co-integration test, and the Granger causality tests. The findings include that there is a long-term relationship between growth and human capital investment; there is no causality between education and Gross domestic product; there is a bi-directional relationship between health services and economic growth in Nigeria; there is evidence of unidirectional causality running from ICT to Gross domestic product; There is no causal relationship between Gross domestic product and PSTS in Nigeria. This implies that neither variable is entirely driven by the other. Recommendations include that policies should be stepped up to boost investment in human capital in the country. The policymakers should urgently engender policies that will trigger growth in the economy. This will enhance investment in human capital. More government spending should be channeled to education, health, and other social cost that benefit human capital.
Keywords: Human capital investment, gross domestic product, emerging economies, human capital.

INTRODUCTION

There is a strong relationship between human capital and economic growth. Many countries' governments, especially emerging economies, recognize that the relationship between the two variables exists. Ekesiobi *et al.* (2015) assert that the government at various levels provides higher education, health facilities, and other services at little or no cost. There is a direct relationship between a healthy and highly educated workforce and the country's economic development. Since the group labor force invariably earns higher salaries, their spending patterns will increase; hence, demand is stimulated, and national income is boosted. However, these facets of human capital can only be energized and harnessed when adequate investment is made. Hence, the concept of investment in human capital comes to bear.

By enhancing the total productivity level and potential earnings of the labor force, human capital is pertinent to growth. Oladeji (2015) opines that human capital can be measured in skills, qualifications, and ability to create new products. Enhancement of human capital may take the form of division of labor and specialization. Also, since human capital skills, qualifications, and others cannot be monetarily measured, we measure it via human capital investment contributions to the economy.

A dual relationship exists between human capital and economic growth and human capital investment. On one arm, the Endogenous growth theory asserts that human capital grows the economy. Increased human capital in science and technology, education, health, and others leads to increased innovation, economic boost, social well-being, improved productivity and profitability, and participatory governance. These, in aggregate, drive economic growth. On the other arm, increased economic growth triggers the quality of human capital for the populace. However, in Nigeria, it is yet to be ascertained if human capital investment is economic growth or vice versa. This calls for investigations.

Even though Nigeria is endowed with tremendous human and natural resources, the nation is characterized by lesser human capital investment in health and education. Adelakun (2016) observed that despite the country's immense and unquantifiable human and physical endowment, there is a persistent shortage of skilled labor, poverty, poor healthcare system, br, drain, and poor education systems.

The study contributes to the literature in two ways- research and policy. For research purposes, the study will stimulate further quest for potential and foremost researchers while providing findings and recommendations that will stimulate policy initiative and implementation by the economic managers. The research interest is founded on the concern that very few studies have been done on this topic in Nigeria. Therefore, further study on this subject is pertinent. The policy concern emanates from the belief that the findings of the study will no doubt present to the monetary authorities in emerging economies in general and Nigeria, in particular, to enhance further the policy tool to achieve qualitative and quantitative investment in human capital, which will trigger growth in the economy.

The objective of the paper is to ascertain if the investment in human capital drives economic growth or vice versa in the country within the reviewed period.

LITERATURE REVIEW

Human capital investment

The 2020 World Bank release of the Human Capital Index (HCI) shows that the top 5 countries with ranks are- Singapore at 0.88, Hong Kong at 0.81, Japan 0.80, South Korea 0.80, and Canada at 0.80; while the bottom 5 countries by Human capital Index include- Niger 0.29, Chad 0.30, South Sudan 0.31, Mali 0.32 and Liberia 0.32 The HCI is a basis for the government to prioritize and promote human capital given its enormous role in National development. Dhyani's (2022) human capital index is essential for ascertaining any economy's health over time. The World Bank asserts that the HCI ranges from 0 to 1. This directly bears on the level of investment made to this all-important index.

The investment in human capital denotes the actual investments made to harness and bring out the ideals of human capital. It is usually in monetary terms. This, then, is measured viz-a-viz as the contribution to the GDP to ascertain the contributions of human capital to the economy's growth.

Economic Growth

It is the metric for measuring the economic activity of an economy over time, usually annually. It is a proxy for the Gross domestic product (GDP). Gross Domestic Product is the sum of gross value added by resident producers in the economy plus any product taxes and minus any subsidy not included in the product's value. Depreciation is not taken into consideration in calculating the GDP. Higher GDP undoubtedly is a good indicator of financial development. Economic growth is an index of the health of any economy regarded as pertinent for achieving macroeconomic objectives.

However, the real economic growth is measured in this study as the annual growth in the GDP, that is, the GDP growth rate. Gross Domestic Product GDP growth rate denotes the change in the GDP from one year to another. It may be an increase or decrease. The increase in this rate portends a favorable effect on the development of the financial sector.

Studies that buttress the effect of education on growth include Ekesiobi et al. (2015), that suggest a positive but insignificant effect of education on the growth of the Nigerian economy. An educated populace is ideal for the sustainable growth of the nation.

The a priori expectation of the study is that there should be a feedback caution between the explanatory and dependent variables. This is so since human capital is synonymous with growth, while growth is the bedrock for quality human capital investment.

Theoretical Review

Endogenous growth theory asserts that internal forces primarily and majorly trigger economic growth. The theory affirms the supremacy of knowledge, skills, innovations, and human capital as drivers of economic growth. The theory, therefore, buttresses the cardinal role of human capital in the quest for economic growth attainment.

The theory is most relevant and applicable to the study in achieving the objective, rejecting or accepting the null hypothesis, and proffering a solution to the problem of the study. Most importantly, the theory supports the a priori expectation of the study that human capital investment is expected to stimulate and trigger growth.

Empirical Review

Adeyemi and Ogunsola (2016), in their study using the ARDL co-integration techniques, found a positive and long-run significant impact of human capital on Nigeria's economy. The study further suggested that

the government should spend more on human capital in the education sector to sustain growth in the country. Adelakun (2016) investigated human development and economic progress in Nigeria using Ordinary Least Square OLS and found human capital's direct and significant effect on economic growth. Obi and Obi (2014) studied the effect of public spending on economic growth from 1982 to 2012. Findings depict no long-run relationship between education expenditure and economic growth in Nigeria. Ekesiobi *et al*. (2015) studied the effect of public spending on education and manufacturing output in Nigeria employing the OLS techniques. Findings indicate that government expenditure on education has a positive but insignificant effect on manufacturing output growth in Nigeria. The study recommends that government expenditure include vocational institutions specializing in manufacturing output growth.

METHODOLOGY

We used the Nigeria data ranging from 1981 to 2022. This aims to ascertain the causality between human capital investment and economic growth. Data was collected through secondary sources – the statistical bulletin of the Central Bank of Nigeria (CBN). CBN data is preferred as a source of data due to CBN's position as the apex of the financial system and thus provides authoritative, reliable, authentic, and realistic data and figures.

The independent variable is the contribution of human capital investment to the gross domestic product. These are the contribution of such investment on education to GDP; human health and social services contribution to GDP; professional, scientific, and technical services contribution to GDP; and information and communication contribution to GDP. ICT includes the telecommunication sector, publishing, motion pictures, sound recordings, and broadcasting.

The dependent variable is economic growth and GDP growth rate. Note that GDP is at current basic prices, while the independent variable is the contribution of human capital investment to the gross domestic product. These are proxy as Ed/GDP, the contribution of education to GDP; HHSS/ GDP, = human health and social services; PSTS/GDP, professional, scientific and technical services contribution to GDP; ICT/ GDP= information and communication contribution to GDP

It is very pertinent to pinpoint the rationale for choosing the independent variables. Since we cannot measure human capital quantitatively, and data of such does not exist, we then measure human capital investment viz-a-viz the contribution of such investment to the gross domestic product. Of course, this is indisputable since the study is on human capital investment and not on human capital. Given the aforementioned, the study is basically on investment in human capital, and measurement of such investment can only be empirically and statistically measured in real terms by the contribution of such investment in human capital to the gross national product. Furthermore, this is the most appropriate way of drawing, comparing, and investigating the nexus between the dependent and explanatory variables (economic growth and investment in human capital).

The tool used is the Ordinary Least Squares (OLS) time series data. Descriptive and econometric statistics were employed. The descriptive includes the mean and median mode, among others. The Augmented Dickey-Fuller (ADF) unit root test, the Johansen co-integration test, and the Granger causality test were performed.

The ADF was adopted to ascertain if the variables have unit roots and to determine if the series have different orders of integration: I I(0) and I(1), in different order. However, if the series are integrated in the same order or integrated into the I(2), the ARDL cannot be adopted.

The following augmented model is formulated.

$$L\Delta\, LGDP = \beta_0 + \beta_1 LEdGDP + \beta_2\, LHHSSGDP + \beta_4 L\, PSTS + \beta_5 LICTGDP + t \; \ldots \; 1$$

where,

GDP is gross domestic product, EDGDP is a proxy for the contribution of education to GDP; HHSS represents the contribution of human health and social services to GDP; PSTS depicts or contribution of professional, scientific, and technical services contribution to GDP; ICT/ GDP depicts or contribution of information and communication contribution to GDP; L = log, β_0 = constant, β_1, β_2 = explanatory power of the variables, t = stochastic error term.

To achieve the objective of the study, the following tests were run: the descriptive statistics, the Augmented Dickey-Fuller (ADF) unit root test (URT), the correlation test, the autoregressive distributed lag, and - Granger Causality test- Pairwise Granger Causality Test.

Econometric Tests

Unit root test

The ordinary least squares (OLS) statistic is always employed for time series tests. The OLS can often be associated with simultaneity bias and spurious influences. To circumvent this problem, the time series properties of the data set employed in estimating the equations must be ascertained. The Augmented Dickey-Fuller (ADF) unit root is performed to test the stationary in order of the variables. The Unit Root Test is a series of statistics. Dickey and Fuller (1979) opine that "a series, say, X_t is said to be integrated of order k, that is, X_t [] $I(k)$ if it is stationary after differencing it k times. When calculated- t ratio is less than the critical value (table value), the null hypothesis of unit root (non stationary) is rejected in which case the level of time series X_t is characterized as integrated of order zero i.e. I (0). But if it is observed that the individual time series in the equation are integrated of order one I(1), then the series is said to be non stationary. If the variables are integrated of the same order I(1), we move a step further to employ the Johansen (1991) co-integration test procedures to test the co-integration among the variables".

Co-integration test

Next is the Johansen (1991) co-integration test. It depicts two likelihood ratio tests (Trace and Maximum Eigenvalue) to test the presence of no co-integration regarding the co-integrating vectors at a 5% significant level. Notably, a set of variables is said to be co-integrated if a linear combination of their individual integrated series I(d) is stationary. Generally speaking, Johansen (1991) asserts that "two variables are said to be co integrated if they have a common stochastic trend, that is, if they move together for a long period of time. Succinctly put, a set of variables that are stationary in their first differences but not stationary in their levels are said to be co integrated if their exits a stationary linear combination between them".

We therefore generate the equation (ii) below;

$$X_t = \sum_{j=1}^{m} A_i X_{t-Ii} \qquad \ldots (2)$$

Where μ_i is the column vector of the error term, X_t is the vector of the variable to be determined. Adding $X_{t-1}, X_{t-2}, \ldots X_{t-m}$ and $A_1X_{t-1}, A_2X_{t-2}, \ldots A_mX_{t-m}$ to both sides of sides of equation (ii), equation (i) can now be expressed in first difference form as

$$\Delta X_t = \sum_{i=1}^{m-1} di\, \Delta X_t\text{-}m + \prod X_{t-1} + \mu_1 \qquad \ldots (3)$$

where

$\prod_{rxq} = (K_{rxq}\text{-}A_1\text{-}A_2 \ldots A_m)_t$, $K = -K + A_1\, A_2 + , \ldots Am$ and K is $n \times n$ square matrix. Also, the coefficient matrix $\prod$ contains the long-run relationship among the variables in the vector of data

The decision rule is thus -if the calculated values of the individual time series in the equation are greater than the critical values, using Johansen-Juselius (1990), the independent variables are not statistically significant in influencing or affecting the dependent variable. Hence, the null hypothesis is accepted.

Granger causality test.

If it is discovered that series are co-integrated, the standard Granger causality test is constructed. This was developed by Granger (1969). It tests causal relations between two or more variables in a time series. The following model is the basis:

$$\Delta LGDP_t = \sum_{i=1}^{m-1} \beta\, \Delta LHCI_{t-1} + \sum_{i=1}^{m-1} \delta_j \Delta LGDP_{t-j} + \varepsilon_t \qquad \ldots (4)$$

$$\Delta LHCI = \sum_{i=1}^{m-1} \beta \Delta LGDP_{t-1} + \sum_{i=1}^{m-1} \lambda_j \Delta LHCI_{t-j} + \mu_1 \qquad \ldots (5)$$

where,

$LHCI_t$ is the log of human capital investment, $LGDP$ is the log of economic growth, μ_1 is the white noise disturbance term, ε is the white noise disturbance term.

The decision rule is thus- if the probability value (the probability) is equal to, or greater than 0.05, we accept the null hypothesis that there is no causality (or that one variable does not Granger cause the other) between the variables. Hence, we reject the alternative hypothesis. However, if the p-value (the probability) is lesser than 0.05, we reject the null hypothesis that there is no causality (or that one variable does not Granger cause the other) between the variables; hence, we accept the alternative hypothesis that one variable, Granger cause the other. Thus, if probability = or > 0.05, accept (do not reject) the null hypothesis; if probability < 0.05, reject (do not accept) the null hypothesis.

If the coefficients of the dependent variables are statistically significant when λ values are not, it implies that the independent variable Granger causes the dependent variable. On the contrary, the dependent Granger causes the independent variable. However, if both variables are statistically significant, there is bidirectional causality or feedback.

RESULTS AND DISCUSSION

Table 1. Descriptive test Results

	GDP	ED_GDP	HHSS_GDP	ICT_GDP	PSTS_GDP
Mean	40119.76	814.0619	269.7671	4131.963	1511.418
Median	9733.195	266.6950	125.8100	420.1400	68.56000
Maximum	173541.3	3875.780	1121.340	20015.43	8001.540
Minimum	144.8300	3.400000	1.600000	23.20000	2.590000
Std. Dev.	53196.81	1130.144	335.9252	6055.477	2280.181
Skewness	1.214686	1.324659	1.120948	1.354645	1.429608
Kurtosis	3.174886	3.393356	2.906588	3.598023	3.872185
Jarque-Bera	10.38176	12.55383	8.810944	13.47130	15.26536
Probability	0.005567	0.001879	0.012210	0.001188	0.000484
Sum	1685030.	34190.60	11330.22	173542.4	61968.15
Sum Sq. Dev.	1.16E+11	52366239	4626675.	1.50E+09	2.08E+08
Observations	42	42	42	42	41

Source: Researchers' Computation

The estimated mean value is employed to estimate the pattern of dispersal. The figures are 40119 for the explanatory variables- education, health, ICT, and professionals, respectively. The standard deviation depicts the variability from the mean or average value. The values shown in Table 1 above depict that GDP stands at 53196, while for the explanatory variables, it is 1130, 335, 6055, and 2280, respectively. It depicts that some variables have low variability, such as health, while others have high variability, such as GDP BOP. In summary, all values are widely dispersed around the mean. This indicates that they are grossly affected by the extreme mean.

The values are also positively skewed, with such values as 1.2 for the GDP, 1.32, 1.12, 1.35, and 1.42, respectively, for the independent variables.

The shape can be flat or peak in the standard curve for kurtosis. As it is well known, kurtosis measures the "tailedness" of the probability distribution of a real-valued random variable. The variables are normally distributed or mesokurtic since the kurtosis value equals 3 or revolves around 3. Also, the variables depict a reasonable level of association with probability significance at 0.05 level of significance.

Jarque-Bera is used to measure the normality of the series, that is to say, whether the series is typically distributed or not. The decision rule is that the residuals are normally distributed at a 5% level of insignificance.

Although the variables exhibit reasonable signs of association in the descriptive analysis, we also subject these claims to more econometric tests to confirm these claims.

Table 2. Unit root test Results

Table 2 Unit Root test result

Variable	Intercept Only	Decision	Trend and Intersect	Decision
LGDP	0.9981 (-2.37469)*	I(0)	0.4199 (-3.5766)*	I(0)
LED/GDP	8.1431 (-2.9351)	I(0)	2.459 (-3.5236)*	I(0)
LHHS/GDP	3.5161 (-2.9369)	I(0)	1.8162 (-3.5236)*	I(0)
LICT/GDP	6.4700 (-2.9350)	I(0)	-3.5180 (-1.6175)	I(0)
LPSTS/GDP	4.1478 (-2.9484)*	I(0)	2.5269 (-3.5442)*	I(0)

Source: Researchers' Computation

For the unit root test results - The Augmented Dickey-Fuller unit root test depicts that the variables are integrated of order I(0) at 1%, 5%, and 10% level of significance, respectively, as the case may be. Since variables are integrated in the same order, we then employ the Johansen co-integration to find the long-run relationship among variables. Therefore, we go a step further to employ the co-integration test procedures to test the co-integration among the variables.

Table 3 Johansen Co-integration test

Sample (adjusted): 1983 2022
Included observations: 37 after adjustments
Trend assumption: Linear deterministic trend
Series: GDP ED_GDP HHSS_GDP ICT_GDP PSTS_GDP
Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.843488	172.5463	69.81889	0.0000
At most 1 *	0.781595	103.9253	47.85613	0.0000
At most 2 *	0.509181	47.63324	29.79707	0.0002
At most 3 *	0.409276	21.30106	15.49471	0.0059
At most 4	0.048102	1.823995	3.841466	0.1768

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.843488	68.62106	33.87687	0.0000
At most 1 *	0.781595	56.29203	27.58434	0.0000
At most 2 *	0.509181	26.33218	21.13162	0.0085
At most 3 *	0.409276	19.47706	14.26460	0.0068
At most 4	0.048102	1.823995	3.841466	0.1768

Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Since the variables are integrated of the same order, I(0), we move further to employ the Johansen (1991) integration test procedures to test the co-integration among the variables. The Johansen methodology is the generalization of the ADF test. Two likelihood ratio tests (Trace and Maximum Eigenvalue) were used to test the hypothesis regarding the co-integrating vectors. The results suggest an underlying long-run stationary steady-state relationship between the Gross Domestic Product and imports, exports, and trade balance. The trace test indicates two co-integrating equations at 0.05% level, so the null hypothesis of no co-integration cannot be accepted, i.e., r=0 among the variables. This is depicted in Table 3.
The results suggest the existence of an underlying long-run stationary steady-state relationship between the variables of trade growth and GDP. The trace test indicates two co-integrating equations at 0.05% level; hence, the variables that exhibit no co-integration cannot be accepted, i.e., r=0 among the variables. This is depicted in Table 3.

Table 4 Pairwise Granger Causality test result

Null Hypothesis	F- statistic	Probability	Decision	Type of causality
LGDP≠ > LED	16.21	1E-05	Not Rejected	No Causality
LED ≠>LGDP	0.6208	0.5433	Not Rejected	No Causality
LGDP≠>HHSS	3.1990	0.05	Rejected	Causality
LHHSS ≠>GDP	8.81	0.0008	Rejected	Causality
LGDP≠> LICT	22.65	5E-07	Not Rejected	No Causality
LICT ≠> LGDP	5.492	0.0084	Rejected	Causality
LGDP≠> LPTS	27.943	1E-07	Not Rejected	No Causality
LPTS ≠> LGDP	0.314	0.73	Not Rejected	No Causality

Source: Researchers' Computation
Table 4 depicts the Pairwise Granger Causality Tests. The test depicts interesting results. The probability of the causality from the contribution of economic growth to education is equal to 1E-05, depicting no causality. Equally, the probability of the causality from education to economic growth (0.54) is more than 0.05, showing no causality. Therefore, investment in education has not driven economic growth as the growth rate has not been triggered by the investment in education affected by domestic prices in Nigeria.
Further results show that growth and health have affected each other. The probability of causality between health and growth is 0-008, while that of growth to health is 0.05. Both values cannot be said to be greater than 0.05 and exhibit causality. We conclude that a bidirectional causality exists between health and growth. This implies that the contribution of health to growth has triggered the growth of the economy and vice versa.
Regarding the GDP and ICT, the causality from the former to the latter is 5E-07, while the causality from the latter to the former is 0.008. in the former, the probability is more significant than 0.05 and shows no causality, and the latter is lesser than 0.05 and exhibits causality. This implies a unidirectional causality between GDP and ICT, from ICT to growth.
The probability of the causality from the GDP to PTS (i.e., 1E-07) is greater than 0.05, depicting no causality. The probability of the causality from PTS to the growth (0.73) is greater than 0.05, showing no causality. There is no causality between PTS and GDP in Nigeria.

Discussion of Findings

On the first finding, education's contribution to GDP has not affected growth, which is unsurprising. Incessant strikes in the educational system, dilapidated schools, and lack of motivation for teachers have affected educational standards and, hence, little contribution of the sector to growth. Also, growth has not affected education due to two reasons. The funding and investment in education are low and inadequate; secondly, the little funds are not always effectively utilized due to fraud and corruption. Most Nigerians who can afford it now study abroad as most universities in Nigeria are beclouded with infrastructure decay.
The second finding of bidirectional causality between health services and growth is surprising. Despite the decay in the health sector resulting in health tourism by the elite class abroad, health and social services

have affected each other. However, that does not imply that all is well in the health sector. More funding and careful monitoring of the spending of such funds is direly required.

The third finding of unidirectional causality between ICT and growth is not far-fetched. Nigerians, especially the youth, have fully embraced ICT over the years. The country is ranked high among nations that imbibed ICT globally. No wonder ICT has enormously affected growth as growth has also triggered development in that sector.

Finally, there is no causal relationship between the contribution of professional and technical services to growth and economic growth, which is not surprising. There is a high and soaring level of unemployment in the country. Also, workers' minimum wages are not only meager but, in real terms, tantamount to nothing as inflation reduces them.

The findings summarily are that there is no causality between education and growth; there is no causality between professional and technical services and growth; there is feedback or bidirectional causality between health and social services and growth; there is unidirectional causality between ICT and growth running from ICT to Growth; there is no causality between professional and technical services and growth. The findings negate those of Adelakun (2016).

CONCLUSION AND RECOMMENDATION

The study investigated the causality between the investment in human capital and economic growth in emerging economies in general but with particular reference to Nigeria between the period spanning from 1981 to 2019. Both descriptive and econometric statistics were adopted. Findings show a long-run relationship between the dependent and independent variables; also, ICT and health have a causal relation with growth, while education and professional services have no causality with growth within the reviewed period in Nigeria. The recommendations include that since human capital can decrease by depreciating over time, the labor force can improve human capital by investing more in the benefits of training, education, and employee training. Improved and increased budgetary allocations to social services such as education, health care, technology, and science remain vital and urgent to improve human capital. Also, people should be protected and invested if the nation is poised to attain an inclusive global economic meltdown recovery and economic growth. Finally, continuous investment in human capital via health, education, and ICT will trigger productivity in both the long and short run to stimulate economic growth on the one hand and ensure such funds are judiciously used devoid of fraud and corruption on the other hand. Also, inflation, price fluctuations, and other economic bottlenecks should be checked.

Economic growth could have been further boosted if there had been considerable investment in human capital in Nigeria within the period studied in the study. Furthermore, the inadequate funds invested in human capital could not be said to be genuinely utilized, as fraud, corruption, and bureaucratic bottlenecks are the order of the day.

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SUB THEME
FAMILY BUSINESS AND SUSTAINABILITY FOR DEVELOPMENT

OWNERSHIP STRUCTURE AND RETURN ON ASSETS OF LISTED FIRMS IN NIGERIA

Edwin F., Ihendinihu, John U. and Ekwe, Michael C.
Department of Accounting,Michael Okpara University of Agriculture, Umudike, Abia State.
Corresponding author: edwinfash@yahoo.com

ABSTRACT
This study investigated the effect of ownership structure on the return on assets of firms listed on the Nigerian Exchange Group. Data on four components of ownership structure (institutional ownership, ownership concentration, foreign ownership, and managerial ownership) and Return on Assets (ROA) were extracted from published financial statements of 79 firms for a period of eleven years (2010 to 2020). Data on the Debt to Equity ratio was also extracted and used to control for financial leverage in the study. *An ex post facto* research design was adopted, while panel data Generalized Method of Moments Regression was used in analyzing the data based on the outcome of various data screening and diagnostic tests. The results revealed that institutional ownership, managerial ownership, and ownership concentration had significant effects on the return on assets (ROA), while foreign ownership had no significant effect on the return on assets of listed firms in Nigeria. The study concludes that ownership structure components substantially influence the ROA of listed firms in Nigeria and recommends encouraging institutional ownership as it has a significant positive trade-off on the return on assets of listed firms in Nigeria.
Keywords: Ownership structure, Institutional ownership, Ownership concentration, Return on assets, Leverage, Listed firms.

INTRODUCTION
Firms use several approaches to structure their ownership, and the type of ownership structure adopted must agree with the company's vision (Kangai, 2019). Predominantly, the vision of most firms is growth in revenues. Return on assets (ROA) is used as a measure of growth or changes in revenues. According to Hargrave (2022), return on assets is a financial ratio that indicates how profitable a company is about its total assets. Corporate managers, analysts, and investors can use returns on assets to determine or evaluate the financial health of the firm (Birken & Curry, 2021). ROA is commonly expressed as a percentage using a company's net income and average assets. A higher ROA means a company is more efficient and productive at managing its balance sheet to generate profits, while a lower ROA indicates room for improvement.

Furthermore, an increase in return on assets of a firm will boost the income of its employees, bring better quality products for its customers, and have better environment-friendly production units. Consequently, higher returns will mean more future investments, generating employment opportunities and enhancing citizens' income. Return on assets is the dependent variable of the study.

On the other hand, ownership structure is an important corporate governance mechanism (Denis & McConnell, 2002). Nahila and Amarjeet (2016) argue that ownership structure, being a system within corporate governance to accomplish improved performance of a firm, has been considered to influence firm performance for many years. The ownership structure is defined by the distribution of equity about votes and capital, as well as the identity of the equity owners (Saseela &Thirunavukkarasu, 2017). As opined by Thomsen and Conyon (2012), ownership structure consists of two distinctive features: Ownership concentration, which depicts if a firm is owned by one or few large owners (concentrated) or by multiple smaller owners (dispersed/diffused), and ownership identity, referring to the type of owner such as individuals/families, institutions or other firms.

The causal link between ownership structure and return on assets of listed entities in Nigeria has been considered a significant concern amongst firms, investors, policymakers, and economists. This connection has been the subject of an important and ongoing debate in the corporate finance literature, which began with Berle and Means (1932), who identified an inverse correlation between the diffuseness of shareholdings and a firm's profitability. This view was later challenged by Demsetz (1983), who argues that a corporation's ownership structure should be considered an endogenous outcome of decisions that reflect the influence of shareholders and trading on the market for shares. Ownership structure proxies include institutional ownership, ownership concentration, foreign ownership, and managerial ownership.

The foregoing argument has been recognized as a dominant issue of controversy and debate in the corporate finance literature (Nnabuife *et al*., 2017).

Firms' funding structures with a preponderance of debt capital have inherent financial risks that such entities are bound to leverage on. Thus, investigations on the causal link between ownership structure components and the profitability proxy are bound to be affected by leverage introduced in this study as a control variable. Financial leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity (Mutunga & Owino, 2017). The fundamental motivation for this study is to provide additional proof regarding how ownership structure influences the return on assets of listed firms in the Nigeria Exchange Group for the period 2010-2020by, focusing on the conflict arising on incentives due to institutional, foreign, and managerial ownerships and ownership concentration participation on corporate Governance structure.

There are divergent views on how the structure of corporate ownership affects return on assets. The prevailing and persistent lack of consensus in the form of inconsistencies, inconclusiveness, and conflicting empirical findings among various scholars has made further investigations on the subject matter more compelling. Hence, in this study, we aimed to determine the causal relationship between ownership structure and the Return on assets (ROA) of listed firms in Nigeria. The study examined the nexus between institutional ownership, ownership concentration, foreign ownership, and managerial ownership on ROA.

LITERATURE REVIEW

Theoretical Framework

Firms, economists, policymakers, and investors are ultimately eager to know whether ownership structure affects corporate return on assets and how(Andow & David, 2016). The fundamental insight into the issues dates back to Berle and Means (1932), who argue that the separation of ownership and control of modern corporations naturally reduces management incentives to maximize corporate efficiency. This view was later modernized by Jensen and Meckling (1976) and subsequently became known as "agency theory," often used as "a theory of the corporate ownership structure" and the guiding framework for ownership performance studies. The crux of the theory is that self-interested managers (agents) can engage in decision-making and attitudes that may be inconsistent with maximizing the value of shareholders (principals). Two kinds of agency costs exist – agency costs of equity and debt. The conflicts between managers and shareholders lead to agency costs of equity, and the conflicts between shareholders and debt–holders lead to agency costs of debt (Andow & David, 2016). Usually, managers are interested in accomplishing their targets, which may differ from the firm's value. The owners may try to monitor and control the managers' behaviors. These monitoring and control actions result in agency equity costs, ultimately leading to a reduced return on assets. When lenders provide money to a firm, the interest rate is based on the firm's risk; managers might be tempted to transfer value from creditors to shareholders. These monitoring and control actions also result in agency debt costs. This theory contains ingredients vital to the study of ownership structure and the return on assets of listed firms and is, therefore, considered apt for the study. It takes its position regarding how conflicts of interest may result in future poor performance of the firms, how ownership structure is viewed as an essential instrument for corporate governance to sort out the problem of conflicts of interest between shareholders and managers, and how ownership concentration has the potential to reduce the agency problem, thereby improving the return on assets of the firm.

Institutional ownership and return on assets

Institutional ownership is a tool used to mitigate the impact of agency problems where large individual shareholders make decisions for their interests at the expense of minority stockholders (Kirimi *et al*., 2022). Institutional ownership is described as other institutions' ownership of huge stock in a firm (Cornett et al., 2008). Such institutions may include pension funds and insurance. This ownership is associated with a high return on assets as a result of high-quality management and improved corporate governance (Lin & Fu, 2017 & Galego *et al*., 2019). Institutional investors are essential factors in corporate governance mechanisms well recognized by their ability to monitor management and create an atmosphere of discipline in the organization (Eluyela *et al*., 2020). Ping and Wing (2011) noted that institutional investors help boost corporate performance through an atmosphere of discipline and the ability to monitor management effectively. Besides the foregoing role, institutional investors participate in board meetings and influence decisions. Institutional investors' roles, if effectively and efficiently carried out, will minimize agency costs and positively influence firms' return on assets (Shleifer & Vishny, 1997).

Ownership concentration and return on assets

According to Onuora *et al.* (2022), ownership concentration refers to an ownership fraction or stake in a firm held by shareholders with a continuing interest or significant stake. According to Florackis *et al*. (2009), this fraction is the cumulative amount (in percent) of shares of all shareholders with an ownership stake of 5 or more percent. Ownership concentration or large shareholders have the incentive and ability to monitor and control management decisions (Florackis *et al*., 2009). They use their significant stake in tackling firm agency problems by reducing conflicts between managers and the organization. This they do by being more proactive in monitoring and protecting their investments.

Foreign ownership and return on assets

Foreign ownership describes a structure where one or more foreign persons have the authority or ability to establish or direct the firm's general policies or day-to-day operations (Onuora *et al*. (2022). Foreign investors can be effective monitors of managers in emerging markets because foreign investors demand higher standards of corporate governance. Foreign ownership comes with more experience and knowledge in the supporting adoption of new corporate governance practices (Meng *et al*., 2019). Foreign ownership is a salient monitoring tool to protect a firm's profits and shareholders' wealth (Al-Jaifi, 2017). If foreign investors assume the role of active monitors, agency problems will be minimized, and firms' return on assets is expected to increase as foreign ownership increases.

Managerial ownership and return on assets

Managerial ownership can also be referred to as directors' or insider ownership. It is the proportion of shares that the executives own. As explained by the agency theory, managerial ownership is one of the techniques used to reduce agency problems. According to Jensen and Meckling (1976), managerial ownership is applied to improve the value of the firm attained through increased financial performance. The separation of ownership and control is a subject of concern to many researchers as empirical studies show mixed findings on the relationship between managerial ownership and return on assets. According to the convergence-of-interests hypothesis, increased managerial ownership can reduce agency problems drastically (Jensen & Meckling, 1976). However, the entrenchment hypothesis proposed that a higher level of management ownership in a firm decreases the firm's performance associated with more executive voting power to control strategic decision-making (Demsetz, 1983).

Empirical Review

Abedin *et al.* (2022) examined the impact of Institutional Ownership and Firm Performance: Evidence from an Emerging Economy in Bangladesh. Using the Ordinary Least Square (OLS) estimation technique based on a sample of 180 listed firms from 2008 to 2018. The results indicate that both domestic and foreign institutional investors positively affect firm performance measured by Tobin's Q and Return on Asset (ROA). Onuora *et al*. (2022) investigated the relationship between ownership structure and financial performance of quoted non-financial firms in Nigeria. Ownership structure was measured using institutional ownership, concentrated ownership, foreign ownership and block ownership while firms' performance on the other hand was represented by return on equity (ROE). The statistical test of parameter estimates was conducted using the OLS regression model. *Ex Post Facto* design was adopted, and data for the study were obtained from the published annual financial reports of all the consumer goods firms quoted on Nigerian Exchange Group (NGX) with data from 2012-2021. The findings of the study indicate that institutional ownership, concentrated ownership, foreign ownership, and block ownership have significant and positive influences on firms' performance measured by return on equity (ROE). Alkurdi *et al*. (2021) examined the impact of the ownership structure on firm performance in Jordan. The study employed the multiple-regression model and fixed regression effect to analyze the data. The sample included all Jordanian first market firms listed on the Amman Stock Exchange (ASE) from 2012 to 2018. The paper's findings reveal a positive and significant relationship between institutional ownership and accounting measures, Return on Assets (ROA), and market measure Tobin's Q (TQ). Other ownership structure types, such as concentration of ownership, also affect ROA and TQ. Meanwhile, managerial ownership shows a negative relationship with ROA. Daniel *et al*. (2021) assessed the impact of ownership structure on the financial performance of listed pharmaceutical firms in Nigeria from 2010 to 2019. The sample size of the population is seven (7) pharmaceutical firms listed on the Nigerian Stock Exchange as of 31st December 2019. The study used generalized least square random effect multiple regression techniques to analyze the data. The independent variables used are institutional ownership, block shareholding, and managerial ownership, while ROA measures financial performance. It was established that institutional ownership was found to have a positive and significant impact on ROA. Similarly, managerial ownership

and firm size were positive but not statistically significant. Finally, the study found that block shareholding has an insignificant negative impact on ROA.

In addition, Suleiman and Nasamu (2021) examined the effect of ownership structure on the financial performance of listed oil and gas companies in Nigeria from 2006-2019. Secondary data was extracted from the financial reports and accounts of the sample companies. Robust OLS, as the best estimator of the regression model, was used to analyze the data extracted. The findings revealed that foreign ownership positively impacts the financial performance of oil and gas companies in Nigeria. Kerim et al. (2021) investigated the ownership structure and financial performance of listed manufacturing companies in Nigeria. The Return on Asset was used as a proxy for the effect of the ownership structure variables on the company's financial performance. A sample of 35 listed manufacturing companies was used for the study. The data was collected and analyzed from nine annual reports and accounts of selected sample manufacturing companies. The study found that institutional ownership positively and significantly impacts financial performance. Orbunde *et al*. (2021). Studied the effect of ownership structure on the financial performance of listed deposit money banks in Nigeria. The expo-facto research design was adopted, relying on secondary data from the listed firms' annual reports. Purposive sampling techniques were employed to select 13 firms out of 15 deposit money banks in Nigeria for the 2011-2020 financial year. Panel regression estimation was used, which is a fixed effect by the Hausman test, which was analyzed using E-views 10. The finding shows that managerial ownership and institutional ownership positively affect the capital adequacy of deposit money banks in Nigeria. The study concludes that managerial ownership and institutional ownership have significantly positively affected financial performance and substantially increased the performance of listed deposit money bank banks in Nigeria.

Furthermore, Al-Farooque *et al*. (2020) investigated the effects of corporate board and audit committee characteristics and ownership structures on the market-based financial performance of listed firms in Thailand. They applied GMM (generalized method of moments) as the baseline estimator approach and ordinary least squares and fixed effects for robustness checks on a sample of 452 firms listed on the Thai Stock Exchange from 2000-2016. They found that ownership structures, particularly ownership concentration and family ownership, appear to have no significant influence on market-based firm performance, while managerial ownership exerts a positive effect on performance.Hideaki and Naoki (2020) studied institutional ownership and firm performance under stakeholder-oriented corporate governance in Japan. The study's sample included large listed firms of the TOPIX 500 in Japan during 2010-2016. Performance was measured by Tobin's q and ROA using regression analysis techniques to test the role of institutional investors in stakeholder-oriented corporate governance. Studies showed that institutional or foreign shareholders' monitoring role functions effectively in Japanese corporations.

Alhassan and Mamuda (2020) examined the effect of ownership structure on the financial performance of quoted financial firms in Nigeria. Data were collected from the financial statements of 38 financial firms quoted in the Nigerian Stock Exchange (NSE) from 2010 to 2019. The technique employed by the study was ex-post facto to examine the effect of ownership structure on the financial performance of financial firms quoted in NSE. The study used descriptive statistics, correlation, and multiple regression methods for model estimation through the panel data method. The collected data were subjected to pooled General Least Square, Random, and Fixed Effects regression models to test the study's hypotheses. In this study, ownership structure is represented by institutional ownership, managerial ownership, and ownership concentration as independent variables. Firms' financial performance as the dependent variable was represented by book value per Share. This study found that ownership structure has a positive significant effect on the financial performance of the quoted financial firms, except ownership concentration has a negative effect.Wang et al. (2019) conducted a study on Ownership Concentration, Identity, and Firm Performance: Evidence from China's Listed Firms. The study explored data from Chinese listed companies from 2007–2017, hypotheses were tested, and findings revealed that ownership concentration positively affects firm performance and corporate ownership leads to higher firm performance than financial ownership. The study shows that firms in China benefit more from foreign ownership than firms with only domestic ownership.

Finally, Balagobei and Velnampy (2017) studied the Ownership Structure and Financial Performance of Listed Beverage Food and Tobacco Companies in Sri Lanka. The sample consists of 10 listed beverage, food, and tobacco companies in Sri Lanka. The study collected data from secondary sources, and hypotheses were examined using Pearson's correlation and regression analysis. The results showed that ownership concentration and foreign ownership structure positively correlate with the financial performance of listed beverage, food, and tobacco companies; in contrast, institutional ownership structure

is not significantly correlated with financial performance. It was also found that foreign ownership structure significantly impacts financial performance.

METHODOLOGY

The study adopted *an ex post facto* research design. The *ex-post facto* design was considered appropriate because the data collected on the variables existed prior to the study's commencement and will not be manipulated by the researcher. The population of the study is comprised of listed firms across 10 sectors of the economy in determining return on assets as a core driver of profitability in Nigerian firms. As of 31st December 2021, one hundred and fifty-seven (159) companies were listed in the NGX Plc. The number of firms effectively used as the sample size for the study was scaled down to seventy-nine (79), representing approximately 49.7% of the study population. Piroska (2021) opined that an excellent minimum sample size is usually 10% as long as the population does not exceed 1000. The main criteria adopted for the selection of firms are: the firms selected from each sector must have a complete data set on all the variables for the period covered by the study; furthermore, firms that have been over-flogged in previous studies are also excluded from the study. The study employed a stratified sampling technique in selecting the sample due to the small population of listed firms in NGX and what the eventual sample would result, which negates the use of a standard sampling method.

Measurement of the Study Variables

Table 1 reports how the variables used in the study were measured.

Table 1: Operational Measurement of Study Variables

Source: Author's compilation (2023)

S/N	*Variables*	*Type*	*Measurement*	*A priori expectation*	*Source/reference*
1.	Return on Assets (ROA)	Dependent variable	Profit after tax to total Assets	Neutral	[Eissa, *et al* (2018)]
2.	Ownership Concentration (OC)	Independent variable	Percentage of firm equity held by large shareholders	+	Alkurdi, et al (2021); Onuora, Fabian, & Joshua, (2022).
3.	Institutional Ownership (IO)	Independent variable	Percentage of firm equity held by institutional investors	+	Kao *et al.* (2019)
4.	Managerial Ownership (MO)	Independent variable	Percentage of firm equity held by management and directors of the company	-	Al-Sa'eed, (2018)
5.	Foreign Ownership (FO)	Independent variable	Percentage of firm equity held by foreign individuals and institutions	+	Meng *et al.* (2019)
6.	Leverage (LEV)	Control variable	Debt to Total Equity	-	Ahmed & Duellman 2007

Model Specification

Based on the nature of the hypotheses formulated and the outcome of various data screening/pre-estimation tests conducted, the Panel Generalized Method of Moments (GMM) Regression was considered appropriate for estimating the study parameters. The panel GMM model with instrumental variables and transformation at both First Differences and Orthogonal Deviation is specified as follows:

$ROA_{it} = \beta_1 ROA(-1)_{it} + \beta_2 OC_{it} + \beta_3 IO_{it} + \beta_4 MO_{it} + \beta_5 FO_{it} + \beta_6 LEV_{it} + \mu_{it}$ .. ..(1)

Instrument Specification =@DYN(ROA(-2) OC(-1) IO(-1) MO(-1) FO(-1) LEV(-1).. .. ..(2)

Where,

ROA_{it} = Return on assets of firm *i* in year *t*

$\beta_1 ROA(-1)_{it}$ = Lag of dependent variable (ROA) of firm *i* in year *t*

OC_{it} = Ownership concentration of firm *i* in year *t*

IO_{it} = Institutional ownership of firm *i* in year *t*

MO_{it} = Managerial ownership of firm *i* in year *t*

FO_{it} = Foreign ownership of firm *i* in year *t*

LEV_{it} = Leverage of firm *i* in year *t*

β_1 to β_6 = the coefficients (rate of change) in the predictor or exogenous variables.

Ɛt = Stochastic error term

Models (1) and (2) are the Panel dynamic models used to estimate the parameters for testing hypotheses 1 to 4.

The study used descriptive and inferential (panel data Generalized Method of Moments) techniques to analyze the data collected. Various data screening and diagnostic tests were conducted to verify and ensure that the data collected met the fundamental assumptions that the inferential statistical technique is subject to. The descriptive analysis used to describe the nature of the data indicated that all the variables failed to meet the normality assumption. Again, based on the nature of the Panel data collected (short panel) with a large number of cross-sections (i.e., 79 companies) and a small period (i.e., 11 years covering from 2010 to 2020), the Panel Generalized Method of Moments (GMM) was considered as a suitable estimator and accordingly used. Selection criteria between the first differences and system panel GMM regression approach were carried out by estimating the pooled OLS, the Fixed Effect OLS, and the first differences transformations of the model. The selection criteria indicated that the first difference GMM is preferred as the result shows that this dynamic transformation of GMM is not downward biased.

E-EViews version 10.0 software was used to run the analysis.

In this study, the null hypotheses (H_0) were rejected when the probability value was greater than 5% (i.e., 0.05 confidence level); otherwise, we failed to reject the null hypotheses.

RESULTS AND DISCUSSIONS

Descriptive Analysis

The descriptive analysis of the data collected for the study is shown in Table 2.

Table 2: Descriptive Statistics of the Study Variables

	ROA	IO	FO	MO	OC	LEV
Mean	2.712200	0.489470	0.472350	0.182006	0.557972	4.076322
Median	2.945000	0.520000	0.000000	0.055300	0.580000	0.904150
Maximum	399.1700	1.470000	1.000000	2.549600	1.000000	161803.5
Minimum	-207.6000	0.000000	0.000000	0.000000	0.000000	-231207.7
Std. Dev.	24.62759	0.266882	0.499523	0.258241	0.216661	9726.141
Skewness	5.682181	-0.207867	0.110769	2.714784	-0.432051	-10.08117
Kurtosis	117.0681	2.256232	1.012270	18.83327	2.795033	457.7200
Jarque-Bera	475254.9	26.25788	144.6721	10132.91	28.52410	7492895.
Probability	0.000000	0.000002	0.000000	0.000000	0.000001	0.000000
Sum	2354.190	424.8600	410.0000	157.9808	484.3200	3538.248
Sum Sq. Dev.	525851.2	61.75276	216.3364	57.81908	40.69883	8.20E+10
Observations	868	868	868	868	868	868

Source: Authors' computation with data collected from financial statements of 79 listed companies

Table 2 reveals that the mean value of Returns on Asset (ROA) is 2.712200 for the period covered by the study, indicating that the average value of ROA of the series is 2.7%. The low percentage of the mean value of ROA implies that the firms have a lower preference for the measurement metric. The standard deviation (Std. Dev.) indicates the dispersion from or spread in the series from their mean values. Leverage has the highest dispersion of 9726.141, followed by Return on Assets (ROA) of 24.62759. However,

Institutional Ownership (IO), Foreign Ownership (FO), Managerial Ownership (MO), and Ownership Concentration (OC) have low dispersion from their means of 0.266882, 0.499523, 0.258241, and 0.216661, respectively.
Skewness, which depicts the asymmetry of the distribution around the mean, reveals that ROA, FO, and MO have a long right tail (positive Skewness), while IO, OC, and Lev have a long left tail (negative skewness). The peakness or flatness of the distribution of the series is indicated by Kurtosis. Statistics reveal that ROA, MO, and LEV are not generally distributed as their values exceed the acceptable 3 and are thus presumed to be peaked (leptokurtic) relative to the normal, while IO, FO, and OC with values less than 3 are presumed to be flat (playtykurtic) relative to the normal.
The statistical significance for the Jarque-Bera statistics (JB) of all the variables is less than 0.05. Hence, we reject the null hypothesis that the series are typically distributed. Thus, the series failed to meet the normality assumption, even after transformation processes were carried out. This indicates uncertainty in the trend of the distribution of the data set collected for the study and makes using a linear model inappropriate. Again, the panel data is a short panel with the period (11 years covering from 2010 to 2020) less than the number of cross-sessions (79 listed companies). These data set features call for an appropriate dynamic model/estimation technique (the GMM) that can take care of these problems in the estimation process.

Generalized Method of Moments (GMM) Estimates

Three regressions were estimated to select the most appropriate Panel Dynamic method of GMM between the First Differences and System Approach – the Pooled OLS, the Fixed Effect OLS, and the First Differences transformation. The choice is based on the comparative value of the coefficients of the lag of the dependent variable in the three estimates. Extract from the result as shown in Table 3.

Table 3: Selection Criteria between First Differences and System Panel GMM Regression for ROA Model

Regression Approach	***ROA(-1) Coefficient***	***Remarks***	***Decision***
Pooled OLS	0.402233	Upper bound	1st Differences GMM is preferred since 0.567361 ***is not lower than*** 0.219120
Fixed Effect OLS	0.219120	Lower bound	
1st Differences GMM	0.567361	System GMM is preferred if ROA (-1) Coefficient from 1st Diff. GMM **<** lower bound coefficient; otherwise, 1st Differences GMM is used.	

Source: Authors' computation with data collected from financial statements of 79 listed companies
Since 0.567361 (1st Difference Coefficient of the lag of the Dependent Variable - ROA (-1) is higher than 0.219120 (Fixed Effect Coefficient of the lag of the dependent variable), First Difference GMM is preferred as the result shows that this dynamic transformation of GMM is not downward bias.

Effect of Ownership Structure on Returns on Assets (ROA)

Table 4 summarizes the GMM test results of the effect of ownership structure on ROA based on the first difference GMM transformations.

Table 4: GMM Test Results of the Effect of Ownership Structure and ROA based on 1st Differences Transformation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROA(-1)	0.567361	0.019470	29.14000	0.0000
IO	93.37808	9.568080	9.759333	0.0000
OC	47.19748	25.91771	3.821051	0.0461
FO	-1.468860	30.77619	-0.047727	0.9619
MO	-49.97951	4.566755	-10.94421	0.0000
LEV	-0.000140	0.000154	-0.909284	0.3636

Effects Specification

Cross-section fixed (first differences)			
Mean dependent var	0.390905	SD dependent var	28.47027
SE of regression	35.17516	Sum squared resid	770833.0
J-statistic	41.80307	Instrument rank	51
Prob(J-statistic)	0.566223		

Source: Authors' computation with data collected from financial statements of 79 listed companies

Table 4 provides results to evaluate the validity of the entire model using the J-statistic of 41.80307. The probability of the J-statistic is reported as 0.566223, further indicating that the model is valid and can be relied upon in predicting the effect of ownership structure on return on assets. The results also show that IO, OC, and MO significantly influence return on assets at a 5% level, with IO and OC exacting positive effects while MO negatively correlated with ROA. FO indicated no significant effect on the ROA of the listed companies investigated.

The beta coefficient value for IO of 93.37808 implies that a unit increase in the number of institutional owners will lead to about a 93.4% increase in the return on assets of the listed firms in Nigeria if other factors are held constant. In the same vein, a unit increase in ownership concentration (OC) will result in a 47.2% increase in the level of returns on assets of the firms. On the contrary, a unit increase in FO and MO resulted in a decrease of 1.5% and 49.98% in the returns on assets of the firms investigated.

An estimation test to check for the possible existence of an autocorrelation problem in the model was conducted using the Arellano Bond Serial Correlation test, and the results are shown in Table 5.

Table 5: Arellano-Bond Serial Correlation Test on ROA Model

Test order	m-Statistic	rho	SE(rho)	Prob.
AR(1)	-1.024008	-120472.663135	59521.830349	0.1430
AR(2)	-0.939961	-49015.941154	52146.798258	0.3472

Source: Authors' computation with data collected from financial statements of 79 listed companies

The values of m-statistic for both AR (1) and AR (2) of -1.024008 and -0.939961 are found to be insignificant at a 5% level (p-values of 0.1430 and 0.3472 are both > 0.05). Accordingly, the null hypothesis that proposes the absence of serial correlation is not rejected, and we conclude that there are no serial correlation problems in the series.

The Orthogonal Deviations transformation option of GMM was also executed, and the results are reported in Table 6.

Table 6: Results of Panel GMM Estimation based on Orthogonal Deviations Transformation for ROA Model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROA(-1)	0.358897	0.007942	45.19005	0.0000
IO	41.23069	4.430887	9.305292	0.0000
OC	-22.82205	6.898273	-3.308372	0.0010
FO	-17.08066	2.545861	-6.709187	0.0000
MO	-32.73355	2.168952	-15.09187	0.0000
LEV	-8.44E-05	9.80E-05	-0.861119	0.3895

Effects Specification

Cross-section fixed (orthogonal deviations)			
Mean dependent var	-0.699869	SD dependent var	25.70023
SE of regression	26.67969	Sum squared resid	443455.1
J-statistic	54.74674	Instrument rank	51
Prob(J-statistic)	0.128498		

Source: Authors' computation with data collected from financial statements of 79 listed companies
The probability of the J-statistic is reported as 0.128498, which affirms the model's validity as supporting evidence to the results obtained using the first differences transformation. The effect of IO, OC, and MO on ROA is significant as obtained under the first differences transformation, just as FO and MO sustained negative association with ROA as obtained in the first differences transformation. Except for FO, which was earlier reported to have no significant influence on ROA, all other results on the components of ownership structure are analogous with the results obtained using the first differences transformation.
The robustness test results accord with primary estimates and further strengthen the argument that the resulting estimates presented using the first differences transformation in Table 4 could be relied upon in testing $H0_1$ to $H0_4$ formulated for this study.

Test of hypotheses and Discussion of findings

Testing for the Effect of Institutional Ownership on Return on Assets of Listed Firms in Nigeria.

The null hypothesis is restated as follows:

$H0_1$: *The influence of Institutional ownership on the Return on Assets of listed firms in Nigeria is insignificant.*

Results in Table 4 indicate that the t-statistic for Institutional Ownership of 9.759333 is significant at a 5% level (P = 0.0000 < 0.05). Accordingly, $H0_1$ is rejected, with the conclusion that institutional ownership significantly affects returns on assets of listed firms in Nigeria. This finding is consistent with the *a priori* expectation that increases in institutional ownership investment should stimulate growth in return on company assets, implying that dominance of institutional ownership in a firm's capital structure is likely to increase the ROA of the entity. This finding is in line with the findings of Onuora et al. (2022), Alkurdi *et al*. (2021), and Daniel *et al*. (2021). This is justified because institutional owners have access to huge capital for investment and are much more conscious of injecting controls on their investments to achieve better performance. On the contrary, few other researchers found an insignificant and negative influence of institutional ownership on financial performance (Umar & Binta, 2022 and Rosyeni & Muthia, 2019)

Testing for the Effect of Ownership Concentration on Returns on Assets of Listed Firms in Nigeria.

The null hypothesis is restated as follows:

$H0_2$: *The effect of ownership concentration on the Return on Assets of listed firms in Nigeria is not significant*.

Results in Table 4 indicate that the t-statistic for Ownership Concentration of 3.821051 is significant at a 5% level (P = 0.0461 < 0.05). Accordingly, the result supports the rejection of **$H0_2$**, with the conclusion that the effect of ownership concentration on returns on assets of listed firms in Nigeria is statistically significant. This result conforms to the a priori expectation that the higher the stake of ownership concentration in a firm, the better the performance. This means that when large shareholders dominate the board structure of a firm, the return on assets will increase. The finding agrees with the findings of several researchers: Alkurdi *et al*. (2021) and Bolagobei & Velnampy (2017). The finding is justified because ownership concentration has good knowledge of the firm and incentive and ability to monitor and control management decisions (Florackis *et al*., 2009). Therefore, concentrated shareholders use their significant stake in reducing conflicts between managers and the organization by being more proactive in monitoring and protecting their investments, thereby improving the firm's return on assets. The ownership concentration result contradicts Ismail and Ali's (2020) and Alhassan and Amudaa's (2020) findings, which observed a negative association with the performance proxy.

*Testing for the Effect of Foreign Ownership on Returns on Assets of Listed Firms in Nigeria***.**

$H0_3$: *Foreign ownership has no significant effect on the Return on Assets of listed firms in Nigeria.*

Results in Table 4 indicate that the t-statistic for Foreign Ownership of -0.047727 is not significant at the 5% level (P = 0.9619 > 0.05). Accordingly, we accept **$H0_3$** and conclude thatForeign Ownership has no significant effect on the Return on Assets of listed firms in Nigeria. This result does not conform to *a priori* expectation as it was expected that foreign ownership should enhance the firm's financial performance. This implies that the dominance of foreign ownership in a firm's capital structure decreases the entity's

return on assets. The finding agrees with the studies by Hamza and Suman (2018). The non-significant and negative effect of foreign ownership on return on assets occurred because some foreign owners may have abandoned their monitoring roles for various reasons, such as insecurity in some parts of Nigeria, thereby allowing managers to misrepresent information for their interests. The finding disagrees with the results of some researchers who found a significant and positive association with return on assets (Suleiman &Nasamu, 2021; Tanui *et al.,* 2021).

Testing for the Effect of Managerial Ownership on Returns on Assets of Listed Firms in Nigeria.

$H0_4$: *Managerial ownership does not significantly influence the Return on Assets of listed firms in Nigeria.*

The reference test result in Table 4 shows that the t-statistic for Managerial Ownership of -10.94421 is significant at a 5% level ($P = 0.000 < 0.05$). On this basis, $H0_4$ is rejected with the conclusion that Managerial ownership significantly influences the Return on Assets of listed firms in Nigeria. This result is in tandem with *a priori* expectation because the entrenchment hypothesis proposed that a higher level of management ownership in a firm decreases the firm's performance associated with more voting power by executives to control strategic decision-making (Demsetz, 1983). The result concurs with those of Umar and Binta (2022). It indicates that an increase in managerial ownership will significantly decrease the return on assets of listed firms in Nigeria. This may not be unconnected with the enormous voting power of executives to control strategic decision-making. Some of these decisions could be sub-optimal, that is, in consideration of self rather than the firm's overall interest or financial performance. The result is also contrary to the findings of Hamza &Suman (2018), who found a negative and non-significant effect; Daniel et al. (2021) observed a positive and non-significant effect.

CONCLUSION AND RECOMMENDATIONS

This study empirically investigated the ownership structure and return on assets of listed firms in Nigeria using the Generalized Method of Moments. The findings of the study are summarized as follows: that institutional ownership significantly affects return on assets of listed firms in Nigeria. That the effect of ownership concentration on the return on assets of listed firms in Nigeria is statistically significant. Findings also indicate that Foreign Ownership has no significant effect on the Return on Assets of listed firms in Nigeria and that Managerial ownership significantly influences Return on Assets of listed firms in Nigeria.

The study concluded that institutional ownership, ownership concentration, and managerial ownership all significantly affect the return on assets of listed firms in Nigeria, while foreign ownership is not significant and recommended that Institutional ownership should be increased in firms for better performance. This is because they are more profit-oriented. Therefore, the more the proportion of institutional shareholders in a firm, the better the performance of the firm. Also that firms should consider increasing ownership concentration as it is an effective leverage for the firm because greater ownership concentration can reduce agency problems in the firm and enhance performance. Furthermore, the study also recommends that firms should discourage foreign investors to invest in their firms as higher levels of foreign ownership would lead to poor firm performance hence diminish the performance of the firm. Finally, less attention should be placed on managerial ownership by firms as higher percentage of shareholdings can greatly recede the return on assets of the firm.

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CORPORATE GOVERNANCE PRACTICES IN FAMILY CONTROLLED AND CONCENTRATED OWNERSHIP ENVIRONMENT IN NIGERIA: MISSING LINKS

[1]Ani, Wilson U., [1]Okoro, Victor O. and [2]Uwasomba, Chidi E.
1Department of Banking and Finance, 2 Department of Entrepreneurial Studies
Michael Okpara University of Agriculture, Umudike, Abia State.
Corresponding author:ani.wilson@mouau.edu.ng

ABSTRACT
The persistently high failure and attrition rates among business ventures in Nigeria, particularly in the case of family-controlled businesses, underscore the timeless adage that a concept capable of creating wealth today may also usher in future misery. Nevertheless, it is widely acknowledged that family-owned businesses play a pivotal role in the global business landscape. As such, their establishment, growth, resilience, and longevity are indispensable for the overall progress and well-being of the world economy.This study seeks to address the existing gaps in corporate governance practices within the context of family-controlled and concentrated ownership environments in Nigeria. To achieve this objective, a novel research methodology was employed. A comparative analysis was conducted, drawing insights from the Governance Style and SWOT analysis among multinational companies with a presence in Nigeria. The findings reveal a substantial correlation in corporate governance practices, including the presence of independent board members, the separation of the roles of chairman and CEO, and adherence to ethical standards and compliance. Moreover, it was evident that many of the sampled companies prioritize transparency, stakeholder engagement, and sustainability, aligning their practices with global standards. In light of these findings, it is recommended that Nigerian businesses leverage these valuable insights to enhance their corporate governance frameworks. Moreover, they should evaluate various governance styles and consider adopting elements that are pertinent to their unique operations. By doing so, Nigerian enterprises can fortify their corporate governance practices, promoting sustainability, transparency, and stakeholder engagement, ultimately contributing to the prosperity of the national and global economy. This study underscores the importance of fostering strong corporate governance practices in family-controlled and concentrated ownership environments in Nigeria and offers a path forward to bridge the existing gaps.
Keywords: family ownership, governance, corporate entity, ownership structure, sustainability.

INTRODUCTION
The high failure and attrition rate of business endeavours in Nigeria is legendary, especially among family-controlled businesses lending credence to the frequently mentioned maxim that a great idea that creates wealth today may also create misery shortly. Yet it is now well known that family-owned businesses are one of the building blocks of the world's business environment. Accordingly, their commencement, growth, survival, and perpetuity are *sine qua non* to the overall progress and welfare of the entire world economy.

Most businesses, even the ones that grew to become worldwide conglomerates like Cadbury, Coca-Cola, Guinness and even Shell Oil Company started as privately owned individual and family-owned concerns and for over a century have continued to thrive. This is a confirmation that family firms indeed are often the little seed from which giant oaks grow. There must then be distinctive characteristics that they possess which is lacking or taken for granted by those who fail especially in low and middle-income countries, such as Nigeria

In Nigeria for instance, the list of once formidable but now almost extinct family firms is long and very disheartening. In the transport sector of the economy, giant concerns like Ekenedili Chukwu, Chidiebere, GOU, Tarzan Motors, and Young Shall Grow Motors bestrode the transport landscape like an imperial colossus. And they thrived for a considerable length of time, some for over a quarter of a century until immitigable and irreversible decline set in among almost all of them. The central thesis of this paper is that this decline and attrition should not have happened if early steps had been taken to address critical operational and corporate governance issues that eclipsed their continued operation as transport conglomerates.

The truth is that all businesses and those who own them face challenges at various points in their life cycles. These encompass things like talent acquisition, resource and cash flow management, growing competition, increasing regulation and fluctuations in not only the economic environment but consumer spending and loyalty, and most importantly succession planning issues.

Due to the nature of their business structure, in addition to these challenges, family-owned businesses face a unique set of issues that can have significant ramifications for the health and life of the company. The more interconnected a family is, and especially within a family business where assets are shared the greater the potential for these issues to cause conflict.

The entitlement mentality is yet another issue clogging the progress of family-owned firms. Entitlement mentality describes the mindset of those who demand benefits that exceed their contributions and show little respect to those responsible for those who attained material success in the first place. It often automatically conjures up archetypical images of spoilt, lazy, demanding next-generation brats and trust fund babies. Individuals who want to be handed everything for nothing and one day take over the family empire with little to no experience in its daily operations. While this is an issue some family-owned businesses face when dealing with their next-generation heirs, it is not the only form of entitlement that exists in family businesses. The reality is that the founder's beliefs, patterns, and behaviors can also be rooted in entitlement. Just as the next generation often believes it is their right to control the family business, so founders may feel it is their right to control operations until they die, or sometimes even beyond death.

This paper hypothesizes that with proper corporate governance structures; family-owned businesses can indeed thrive and when combined with robust operational structures can indeed progress continually in perpetuity. The rest of the paper is structured in four sections. A review of related literature engages our minds in the next section while methodological issues are examined thereafter. The third section presents and analyses the data while a fitting discussion and recommendations conclude the paper.

REVIEW OF LITERATURE

The interactions between ownership structure, corporate governance, and firm performance, have attained significant recognition as an important topic in corporate finance and management. This is evidenced by the considerable attention that theoretical and empirical literature has placed on such diverse areas, such as the implications of the heterogeneity of investors and equity ownership structure, among others. These issues form the basis of the review of the literature that follows.

Since the seminal work of Bearle and Means (1982), the notion that the characteristics of a firm's ownership can affect the operating performance of the firm and indeed its survival and competitiveness has received considerable attentionin the literature (Cornett *et al.*, 2008; Barros *et al.*, 2007; Micco *et al.*, 2007; Cornett *et al.*, 2007; Iannotta *et al.*, 2007; Wang, C, 2005; Cho, 1998; Hermalen & Weisbach, 1991; McConnell & Searves, 1990).

There is consensus among empiricists that the role of ownership structure in shaping the operating performance of firms is more pronounced in developing countries than in developed countries, as a result of the relatively undeveloped structure of the capital market in emerging economies (Kim, et al., 2004; Wang, 2005). This submission appears to have informed the continuous efforts by governments in emerging economies to encourage the reorganization of corporate ownership structures for enhanced efficiency and effectiveness. In Nigeria, this restructuring has taken the form of indigenization, divestiture of government holding, privatization, conversion to a public limited liability company, and subsequent quotation on the Nigerian Stock Exchange.

The ownership structure covers both the ownership mix and ownership concentration. The broad spectrum of ownership encompasses government, institutions, management, individuals, and foreigners. The ownership mix will ultimately have consequences on managerial behavior and corporate performance. On the other hand, Ownership concentration refers to the degree to which ownership of a firm revolves around a few closely-knit people or otherwise. The implication is that the higher the percentage of shareholding in the hands of one or a few dominant shareholders, the higher the concentration and vice versa. There are realistic reasons for the departure of ownership structure from the small diversified shareholding structure recommended by economic theory, especially where legal protections are weak. Dyck (2000) posits that ownership concentration and ownership structure, in general, can fill the gap by providing the functions of corporate governance, enhancing the fulfillment of the promise, management monitoring, and lower costs of resolving competing claims.

Claessens *et al.* (2000), for example, examined corporate ownership in East Asian firms and found that owners exert significant control over their firms which is not surprising given that managers and owners are often the same people. This is likely the same scenario in Nigeria, where original owners by arrangement still retain significant control over their firms even after public offers. Again, as a result of the relatively undeveloped market structure in emerging markets, the degree of information asymmetry among participants is usually high; thus granting influential manager-owners greater latitude to engage in and act upon their desires. Hence, significant managerial ownership in a developing economy may support both managerial alignment effects and entrenchment effects.

Jensen and Meckling, (1976) posit that agency costs will be mitigated as a result of the existence of significant managerial ownership. The higher degree of information asymmetry between managers and outside shareholders in an emerging market compels a greater need for alignment of managerial interests with shareholders' interests.

Corporate Governance

The OECD (1999) defines corporate governance as "the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders, and other stakeholders, and also spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance." Some academic researchers, such as Shleifer and Vishny (1997), define corporate governance more broadly as "… ways in which suppliers of finance to corporations assure themselves of getting a return on their investment," whereas the *Financial Times* advances a more practical definition by stating that it "[…] can be defined narrowly as the relationship of a company to its shareholders or, more broadly, as its relationship to society.

Conceptual Issues in the Ownership Structure of Companies

Gursoy and Aydogan (1998) define ownership structure along two dimensions, namely ownership concentration and ownership mix. While the former refers to the percentage of shares owned by a majority shareholder(s), the latter is related to the identity of the major shareholders.

As in other emerging economies (see Appendix F), as related by Gursoy and Aydogan (1998), a cursory look at the ownership structure of Nigerian Companies suggests that they can be characterized as highly concentrated, family-owned firms attached to a group of companies generally owned by the same family or a group of families.

Stressing further, they point out that although professional managers run these companies, family members are actively involved in strategic as well as daily decisions.

From another perspective, Campbell (2003) examines ownership structure from the perspective of the influence of managerial (insider) ownership; the impact of ownership concentration in general and block holders (typically institutional inventors) in particular; and more broadly the identity of owners.

Yet, other creative theorists like Aggarwal and Klapper (2003) expanded the ownership structure concept to include ownership by foreign and domestic institutions as well as ownership by insiders of the firm.

An attempt has also been made in the vast theoretical literature to answer the question: what determines the ownership structure and corporate governance in a particular country? In another dimension, Wang and Xu (1997) posed another important question on why there is a need for ownership concentration in various countries including, emerging economies.

Proffering an answer to the first question, Prowse (1994), argues that ownership structure is strongly connected to the legal and regulatory environment where a firm operates. Prowse (1994) further argues that the regulatory restrictions on investors, particularly, financial institutions holding of large debt and equity stakes in individual firms in Anglo-American countries, have led to relatively dispersed holdings. This is not the case in emerging economies, where such regulations are weak.

Ownership Structure and Corporate Governance

Everywhere, the objective of a corporation is to organize business activities to enhance corporate profit and shareholders' gain, within the constraints of law and ethical principles that are reasonably regarded as appropriate to the ethical conduct of business. The ownership structure plays a critical role in corporate governance composition.

As a concept, corporate governance can be viewed from two perspectives. The narrow view, as opined by Oyejide and Soyibo (2001), perceives corporate governance in terms of issues relating to shareholder protection, management control, and the popular principal agency problem of economic theory.

Rwegasira (2001), further sees this narrow view as being concerned with the structures within which a corporate entity receives its basic orientation and direction. Corollary, the board perspective regards corporate governance as involving issues of institutional, legal, and capacity building.

Claessens (2003), has identified five channels through which corporate governance affects growth and development.

The first is the extended access to external financing by firms; the second channel is a lowering of the cost of capital and associated higher firm valuation. The third channel is better operational performance, through better resource allocation and improved management. Again, good corporate governance can be associated with a reduced risk of financial crises. Finally, good corporate governance can generally mean better relationships with all stakeholders. Charkam (1994) pointed out two basic principles of corporate governance. The first is that management must work to drive the enterprise (firm) forward despite undue constraints caused by government interference, or fear of displacement. Next to this is that this opportunity to use managerial power must be exercised within an environment of effective accountability. Magbagbeola (2005) further highlighted that corporate governance failures may stem from two broad reasons. The most likely reason for such failure is inefficiency in operation by management. This will be a result of an overall diminution in the firm's profit. Another reason is that management may divert a proportion of profits from shareholders by the consumption of excess perquisites. These perquisites include remuneration that is not directly related to performance. Consequently, Short et al (1988) suggest that a system of corporate governance needs to take both efficiency and stewardship dimensions of corporate management into consideration. Another important question in corporate governance is what to do with the Chief Executive Officer (CEO) when there is a decline in performance. This is because there is a strong link between the actions of a CEO and the operating performance of a firm. Often, the reaction to poor performance is the immediate replacement of the CEO. Whether this action enhances subsequent performance is not always clear.

For instance, Fizel and D'stri (1997) report that after the manager was displaced in an underperforming recreational endeavor, the team further slid in performance.

Magbagbeola (2005) notes the central role of the board of directors in corporate governance mechanisms, especially in market economics. Very related to this is that a basic principle of corporate governance is that the shareholders elect the board of directors, who in turn appoint top management. The monitoring role of the board of directors is an important component of corporate governance. The monitoring, ideally, should be done by the shareholders. However, as a result of their limitation, indexed by dispersed ownership and incapability, the board handles the monitoring function on their behalf. The effectiveness of this monitoring function is dependent on the size, independence, and composition of the board of directors. Theoretically, the independence of the board is expected to be a function of the ratio of outside directors to inside directors. Available evidence in the literature produces mixed results. The Central Bank of Nigeria (CBN), in a bid to provide a solution to the corporate governance problem, published a code of corporate governance for Banks in 2003. Accordingly, the publication, CBN (2003) requires that not less than $1/5^{th}$ or at least 2 board members should be independent directors and, importantly that the roles of the Chairman and CEO should be separate and independent. To further address the lingering poor corporate governance practices of Nigerian banks, especially after the recapitalization exercise, the CBN issued another code of Corporate Governance which became effective on April 3, 2006.

Characteristics of family-owned firms

Family-owned businesses come in all shapes and sizes and cover a spectrum of industries. They share all the same concerns as non-family businesses: profitability, responses to competition, adoption, and adaptation to new technologies, relationships between management and employees, and generation of returns to stakeholders, to give a few examples.

But family-owned businesses have their unique challenges. A cursory at some of those challenges that seem to haunt all family businesses at some point in their life cycles reveals the following:

Emotions Unique Within Families

It's an unusual family-owned business where relationships are formed and thrive without emotional components like trust, love, and affection. However negative emotions like resentment, jealousy, and rivalry can create serious problems within the family business. Often the good and the bad emotions are the result of years of experience predating any involvement in the family business. They can emerge as critical factors in unpredictable ways. Effective leaders of successful family businesses must identify these emotional components and take them into account when making business decisions.

Entitlement

When family business ownership is passed by inheritance, there may be heirs actively involved in leading the business, heirs who are employed in non-leadership positions, and other heirs who are passive owners. A common problem among the various categories of owners is that family members feel entitled to a return on their equity in the form of dividends. They may also expect to be provided jobs, regardless of their qualifications, and they might even expect to be paid a salary without actually providing useful service. Managing family members in a business is tricky, particularly if the leaders of the business wish to use the profits of the business to speed its growth rather than rewarding shareholders. In this regard, the effective leader works to diminish the culture of entitlement in favor of operating the family business as an arms-length business.

Employment

Managing employees and maintaining good human resources practices are challenges in any business. Employer liability under state and federal laws can arise in many ways, from wage and hour issues to claims of discrimination, harassment, unfair labor practices, safety issues, requirements for pension plans, workers ' compensation claims, and unemployment compensation. These issues don't go away when a business is owned and managed by family members. But family businesses often operate as if the family relationships exempt them from the rules applicable to other businesses. When good family relationships go bad, the laws applicable to employers and in favor of employees can be powerful weapons in the wrong hands.

Succession

Management and ownership succession in the family business carries with it the continuous challenge of answering the question, "Should management and ownership continue in the family?" In a non-family business, the most likely question will be "How can the business continue to provide benefits to its stakeholders, including investment returns to its equity holders?" It's an exceptional family business that survives and thrives through more than two generations, and investment returns to family members are usually only one priority for the business. Factors like preserving the family name or culture, living up to the expectations of earlier generations, and providing business opportunities for future generations often take priority over investment returns. Succession, in whatever form, is inevitable, and it is a wise business leader who addresses family succession issues before they ripen into a crisis.

Maintain Family Business Networks to Help Overcome Challenges

How can family business leaders identify and address these challenges? One of the most effective ways is to build and maintain contacts with other family business leaders and professional advisers. Rare is the family business challenge that has not been experienced and overcome by other similar family businesses. Family business networks can provide useful opportunities to prepare for and meet those challenges.

METHODOLOGY

This paper adopts a novel model methodology involving case examination of notable individual cum family-owned multinational businesses with visibility in Nigeria that has been in existence for over one hundred eight decades. A brief outline of the strengths, weaknesses opportunities, and threats alongside the corporate governance policies of each is presented, then lessons are drawn from them and presented in the penultimate section of this paper. The cases include Coca cola, Toyota Motor Corporation, Cadbury, Pepsico, Nestle, Samsung, and Philips.

Comparative Analysis of Multinational Corporations: Corporate Governance Practices and SWOT Analysis.

S/N	COMPANY	YEAR	AGE (Years)	SWOT			
				STRENGTH	WEAKNESS	OPPORTUNITIES	THREAT
1	COCA COLA	1892	131	Strong Brand Identity Strong Brand Value Global Reach Market Share Repositioning Portfolio Brand Association Distribution System Acquisitions	Competition With Pepsi Product Diversification Health Issues Infringement Lawsuits Overdependence on Third-Party Technology Providers Environmentally Destructive Packaging Reducing Cherished Coke Products	Extension of The Ready-to-drink (RTD) Coffee Industry in the United States Add New Goods to the Market and Lessen Added Sugar Profits from the Declining Value of the U.S. Currency Leveraging TikTok Entry into the Alcoholic Beverage Sector	Water usage controversy Pollution Lawsuit Fierce competition Economic uncertainty Increasing Health Awareness Possible Contamination
		GOVERNANCE STYLE		The BOD serves as the ultimate decision-making body, provides advice for the CEO, relies on advisors and auditors, holds meetings five times a year, policies aim at promoting transparent and fair markets, ensures proper allocation of resources, protects the rights of its shareholders, provides comprehensive incentives, and ensures important information is disclosed timely.			
2	CADBURY	1824	199	Strong brand Global presence Ownership by a wealthy family	Limited product range Product recalls Lack of US rights Cadbury	Opportunities: Emerging markets Product range expansion Sugar tax New food trends	Sugar tax New food trends

		GOVERNANCE STYLE		Decision-making isn't concentrated in one person; chairman and CEO roles are separate. Non-executive directors must act independently when judging strategy, performance, resource allocation, and code of conduct. Most directors are independent, with no financial interest. Directors' term extension requires shareholder approval. A remuneration committee, mainly comprising non-executive directors, sets executive directors' pay. Interim reports must include balance sheet data, reviewed by auditors. Audit fee info should be public, and auditor rotation rules are necessary. A professional relationship with auditors must be maintained. The business's status as a going concern must be reported.			
3	**PEPSICO**	**1893**	**130**	Water usage controversy Pollution Lawsuit Fierce competition Economic uncertainty Increasing Health Awareness Possible Contamination	• Unhealthy Perception of E-Commerce and Online Customers • Involved in Health and Organic Foods/Beverages Market • Over-dependence on Carbonated Drinks • Numerous Lawsuits • They Don't Always Get it Right with Their Marketing	Changing Customer Preferences Intense Competition Evolving Government Regulations Consumers in Developing Markets	• Intense Competition • Changing Government Regulations • Intense Competition in the Health and Organic Foods/Beverages Market • Uncertain Consumer Preferences in E-Commerce and Online Shopping • The
		GOVERNANCE STYLE		The business is overseen by a board of directors, including one executive director and 13 independent directors. The four board committees exclusively comprise independent directors. Corporate Governance Guidelines are applied, with regular reviews to align with changing regulations and best practices. Compliance with the Global Code of Conduct is ensured, with corporate culture a key agenda item for the Board. Executive sessions between the Audit Committee and the Chief Compliance & Ethics Officer address compliance matters. A mechanism for employees to voice concerns is created, promoting a culture of trust and open communication. The Board emphasizes a corporate culture of integrity and risk awareness through oversight of the integrated risk management framework.			

4	**Nestlé**	**1866**	**157**	Diverse Portfolio Worldwide Presence Strong Relationships with Customers and Other Brands Efficient Workforce	Diverse Portfolio Worldwide Presence Strong Relationships with Customers and Other Brands Efficient Workforce	Expansion into Online Retail Business Leveraging social media Diversification into Health-based Products	Expansion into Online Retail Business Leveraging social media Diversification into Health-based Products
		GOVERNANCE STYLE		Nestlé upholds robust corporate governance practices. A majority of its board members are independent, ensuring impartial oversight. Diversity in leadership roles fosters innovation and representation. Executive compensation is linked to performance, aligning leaders' interests with the company's success. Comprehensive risk management strategies effectively identify, assess, and mitigate risks. Ethical practices are enforced, with a strict code of conduct for employees and partners. Regular interactions with shareholders build trust and transparency. A sustainability commitment focuses on environmental and social responsibility. Detailed, accessible reporting informs stakeholders about performance, governance, and sustainability efforts.			
5	**Samsung**	**1938**	**85**	Brand recognition Skilled and efficient workforce Diversification Economies of scale Vertical integration Distribution network Innovation and a strong R&D	Fierce competition Dependence on the smartphone market Little presence in the software and services industry Quality control issues Legal battles and patent infringement Limited Software differences Vulnerability of its supply chain	Acquisitions and mergers Diversification and expansion TPP launching Launching innovative products HR Management Next-generation smartphone gaming The 5G technology	Increasing competition Controversy Court cases Product counterfeit Economy uncertainty Regulatory and legal threats LG foldable display Dissatisfied users

		GOVERNANCE STYLE		Samsung prioritizes corporate governance with independent directors, ensuring objectivity. Executive directors are recommended by the Board, with candidates suggested by an Independent Director Recommendation Committee for transparency. Independent directors are selected based on qualifications and diversifying expertise. Diversity in nationality, gender, and religion is emphasized. Samsung engages stakeholders, incorporating their input into management, and strengthening board independence and efficiency.			
6	**Toyota Motor Corporation**	**1937**	**86**	Global Dominance Diversified Variety Effective Leadership Strong Brand Technological Leadership Extensive Supply Chain High Production Capability Strong Financial Position	Global Pandemic Cut-throat Competition Negative Publicity Global Economic Turmoil Technology Race Scarce and Expensive Raw Materials	Global Pandemic Cut-throat Competition Negative Publicity Global Economic Turmoil Technology Race Scarce and Expensive Raw Materials	Global Pandemic Cut-throat Competition Negative Publicity Global Economic Turmoil Technology Race Scarce and Expensive Raw Materials
		GOVERNANCE STYLE		Enhancing corporate value and societal trust, fulfilling social responsibilities, adopting a stakeholder-centric approach, enhancing corporate governance practices, ensuring shareholder rights and equality, collaborating closely with stakeholders, maintaining high standards of information disclosure and transparency, defining clear roles and duties for the Board of Directors, and promoting active shareholder dialogue.			

7	**Philips**	1891	**132**	Product Recalls Dependence on Suppliers Highly Competitive Market Regulatory Risk Complex Transformation	Product Recalls Dependence on Suppliers Highly Competitive Market Regulatory Risk Complex Transformation	Intense Competition Regulatory Changes Global Economic Conditions Cybersecurity and Data Privacy Supply Chain Disruptions Product Quality and Safety Issues	Intense Competition Regulatory Changes Global Economic Conditions Cybersecurity and Data Privacy Supply Chain Disruptions Product Quality and Safety Issues
		GOVERNANCE STYLE		The company employs a two-tier board structure, consisting of the Board of Management and the Supervisory Board. They operate within a governance framework that adheres to Dutch corporate and securities laws, Articles of Association, and the Dutch Corporate Governance Code. Compliance with U.S. laws for Foreign Private Issuers is a standard practice. The company maintains a strong focus on business principles and codes of ethics, implementing Philips General Business Principles and specific ethical codes. Detailed corporate governance information can be found in the Annual Report and related documents, including internal regulations.			

DISCUSSION OF FINDINGS

An investigation into the governance styles, strengths, weaknesses, opportunities, and threats of various multinational companies that have outlived their first generation and have existed for over 8 decades with an empirical review of family-controlled businesses in Nigeria.

Family-controlled businesses are a dominant force within the Nigerian business landscape. While our investigation focuses on foreign-owned businesses with visibility in Nigeria, Nigerian businesses must recognize the significance of family-controlled enterprises in their context. These businesses face challenges that are not dissimilar to the foreign-owned companies, including governance and sustainability issues. Therefore, there is a lesson to be learned from how foreign companies navigate these challenges.

Our findings reveal that foreign-owned businesses operating in Nigeria, such as Coca-Cola, Cadbury, PepsiCo, and others, emphasize key corporate governance practices. These practices include having independent board members, separating the roles of chairman and CEO, and adhering to ethical standards and compliance. Nigerian businesses can draw valuable insights from these practices to enhance their corporate governance frameworks.

Governance styles among foreign-owned businesses in Nigeria are diverse. Some place a strong emphasis on transparency, stakeholder engagement, and sustainability, aligning with global best practices. Nigerian businesses should assess these diverse governance styles and adapt elements that are relevant to their operations.

CONCLUSION AND RECOMMENDATIONS

In the context of foreign-owned businesses operating in Nigeria, this research underscores the importance of robust corporate governance practices. Nigerian businesses can take inspiration from these foreign companies to address universal governance challenges. Foreign-owned businesses are integral to Nigeria's economy and bring valuable expertise and global best practices. Their governance practices serve as a model for Nigerian businesses to strengthen their governance structures and contribute to the overall progress of the country. Nigerian businesses should consider the incorporation of independent board members. These members can provide impartial oversight and enhance decision-making, mirroring the practices of foreign-owned companies. Nigerian businesses must prioritize ethical standards and compliance, as this fosters trust and enhances reputation, factors crucial to the long-term sustainability of any business. Develop comprehensive succession planning strategies to ensure a seamless transition of leadership within family-controlled Nigerian businesses, aligning with the practices of foreign companies.

Encourage stakeholder engagement as a means to increase transparency and accountability. This practice can improve relationships with customers, suppliers, and the wider community.

Nigerian businesses should invest in research and knowledge-sharing initiatives focused on corporate governance. By drawing from foreign-owned companies' experiences, Nigerian businesses can cultivate best practices and innovative solutions tailored to their unique challenges.

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SUCCESSION PLANNING AND ORGANIZATIONAL PERFORMANCE IN ECO BANK PLC, UMUAHIA, ABIA STATE

Otuokere, Ifeanyi Charles
Department of Industrial Relations and Personnel,
Management, Michael Okpara University of Agriculture, Umudike
Corresponding author: ic.otuokere@mouau.edu.ng

ABSTRACT
The study examined the effect of succession planning on organizational performance in Eco Bank Plc., Umuahia, Abia State. The study adopted a descriptive survey and data collected through a structured questionnaire shared to target respondents who were employees of Eco Bank Plc. The data generated was analyzed using descriptive and inferential statistics. The findings of this study revealed that mentorship has positive and significant effects on organizational effectiveness, communication has positive and significant effects on organizational efficiency, and technological training has positive and insignificant effect on organizational productivity of Eco Bank Plc., Umuahia. Abia State. The study concluded that a lack of proper succession planning could have a direct effect on causing the collapse of businesses, especially when key players leave the business upon retirement or in pursuit of other options or careers. Based on this, the study recommends that banks design a proper succession plan where the junior staff will be mentored effectively to enhance organizational effectiveness. The management of the studied bank should also create an effective communication medium between the junior and senior staff in the bank for easy communication flow, and the management of the studied bank should take a critical look at the training programs designed by the bank for training and re-training of their staff.
Keywords: Succession Planning, Organizational Performance, Sustainability, Mentoring, Training

INTRODUCTION
Succession planning is an organization's deliberate and systematic effort to ensure leadership continuity in key positions, retain and develop intellectuals and knowledge capital for future purposes, and encourage individual advancement. Succession planning ensures an organization's continued effective performance by establishing a process to develop and replace key staff over time (King, 2019).

As such, succession planning encompasses top management and several other staff working towards enhancing the firm's sustainability. It covers the procedures necessary for a successful transfer, legal and financial considerations, psychological factors, leadership development, and exit strategies (Jacob, 2016).

Also, according to Ajay and Erich (2018), succession planning can be carried out in a company in two ways, namely, utilizing internal resources (developing talent) or acquiring external resources (buying in talent). There is no right or wrong choice when deciding which route to take when implementing a succession plan. It will depend mainly on the availability of talent within the organization. The company gets employees from the outside labor market by buying in talent. Buying talent keeps pace with changing market demands, companies acquire specialized skills, it brings in new ideas and fresh perspectives but is very expensive, and the talent the company buys is unproven.

On the other hand, the company can choose to build its internal talent pool (developing talent). This helps the development of people to the specific specifications of the company, saves money on recruitment fees, enhances career mobility and engagement within the existing workforce, and the company already knows the employee's attributions. However, fewer opportunities exist to inject new knowledge and energy into the company. Looking inward, future success can unlock undiscovered capabilities and talents of employees. These attributes may not have become apparent in their existing roles because of habit and complacency rather than a failure to invest in employee development (Ajay & Erich, 2012).

Furthermore, succession planning ensures a continued pool of qualified candidates, providing provisions to continue effective organizational performance. The twentieth-century management guru cited in (Collins & Kelvin, 2016) attempted to alert corporate leaders to the importance of assuring the stability of their workforce through succession planning. Collins and Kelvin (2016) indicated that failure to prepare the workforce of tomorrow would lead to filling leadership vacancies improperly. The need to have a body present in the vacant position has often motivated hiring unqualified individuals.

Succession planning focuses on manpower planning activities such as recruitment and development of employees in order to fill managerial and top positions. Adams (2019) postulates that succession planning is a process that can provide seamless leadership transition across the organization. A strategic, systematic, and deliberate effort to develop competencies in potential leaders through proposed learning experiences such as targeted rotations and educational training to fill high-level positions without favoritism.

In the words of Mmandu and Ogor (2020), succession planning perpetuates the enterprise by filling the management and employee gap with high-performing people to ensure that every leadership level has an abundance of these performers to draw from, now and in the future.

From this perspective, succession planning is seen as a management pipeline that accelerates management performance over some time. Scharmer (2020) asserts that succession planning is co-creating, a transformational stage during which management explores the future. Succession planning is an organized process comprising identifying and preparing potential successors to assign new roles to pyrroles in organizational performance. It increases the availability of experienced and capable employees who are prepared to assume these roles as they become available. The implementation of succession planning relates to the actual practices carried out in any firm. A practical succession plan implementation helps build strong leadership and departmental relationships and enables an organization to review its goals frequently.

Succession planning is a significant problem within companies in Nigeria and the world. Although experts and small management teams run most companies, few have proper succession planning. The lack of proper succession planning can have the direct effect of causing the collapse of businesses, especially when key players leave the business upon retirement or in pursuit of other options or careers. The exit or exodus of key staff can make a business vulnerable and diminish its worth, as investors will not invest in a business that is not sustainable. Succession planning is one of the most pressing issues within the company's corporate governance sphere. This study, therefore, takes a more in-depth look at succession planning and organizational performance in Nigeria.

Most companies in the country are not placing enough emphasis on cultivating the next generation of leaders who will be required to bring sustainability to their companies in the future. Most companies in the country make the mistake of promoting employees to leadership roles without thoroughly evaluating the true capabilities of these individuals. Possessing a technical skill has often been the primary reason for promoting personnel. However, technical skill does not always translate into leadership ability. Many of these talented individuals drown in their new roles primarily due to lacking leadership training.

Conversely, many internally qualified employees are overlooked for promotional opportunities because top-level administrators are often unaware of the encompassing organizational talent. Externally recruited leaders are often hired to fill the management vacancies. This sometimes causes aspiring leadership candidates to become disgruntled and eventually leave the organization.

Demands on the recruitment and retention of skilled professionals in companies are increasing, and more emphasis is being placed on leadership development and succession planning. As the war for talent and career intensifies, companies' facilities are being forced to evaluate ways to scan the organizational environment for the next generation of leaders and develop succession planning programs that assure the continuity of long-term corporate success.

Although several authors have made efforts, succession planning has not historically been a priority for most organizations. The issue of building layers of qualified leadership candidates has not been given the focused attention or dedicated resources required to prepare organizations for long-term success. Traditionally, replacement methods are used to fill vacancies in leadership. This consisted of pre-selecting substitutes for critical positions. A brief training period may have been implemented to provide future replacements with information about the job they might need to fill. Emphasis was placed on replacement as an answer to vacancies created by a tragedy, such as death or a decision to leave for another position.

Despite regulations against age discrimination, individuals identified as potential candidates for promotional opportunities were typically expected to be younger than those they would succeed. This eliminated many qualified and eager candidates. Interestingly, the replacement method has not been linked to leadership development, and many banking institutions treat staffing contingencies and leadership development as separate and unique concerns. Hence, it is against this backdrop that this study examines the effect of mentorship and communication on organizational effectiveness.

REVIEW OF LITERATURE

Succession Planning

Succession planning is an organization's deliberate and systematic effort to ensure leadership continuity in key positions, retain and develop intellectual and knowledge capital for the future, and encourage individual advancement (Rothwell, 2011). Succession planning can also be defined as a process that ensures the continued effective performance of an organization by establishing a process to develop and replace key staff over time (King, 2015). In this context, succession planning encompasses top management and several other factors. It can cover the procedures necessary for a successful transfer, legal and financial considerations, psychological factors, leadership development, and exit strategies (Jacobs, 2016).

Succession planning is a structured approach to creating consistent and continuous organizational leadership (Wilcox, 2002). It refers to the organization's ownership transition, possibly due to the previous owner's desire to retire or quit. Here, succession may involve the transition of the management position to a family member, an employee, or a buyer outside the organization (Martin *et al.,* 2008).
Succession planning is defined as Any process that is designed to ensure a continued pool of qualified candidates, thereby providing provisions to continue effective Succession planning can be defined as an attempt to determine the number of qualified managers and skilled employees necessary to cover events such as retirement, death, disease, and promotion. This definition includes the organization's potential and the management's strategies. It is a purposeful program for preparing the organization to fill unoccupied positions (Nuttal *et al.*, 2007). Succession planning is a strategic, organized, and predictable attempt to improve potential leaders' capabilities through experiences, such as deliberate job rotations and training, to fill higher positions in the organization without discrimination (Barton & Rouse–Jones, 2007). Succession planning is a program in which one or multiple potential successors are selected for key positions; these individuals develop their careers and receive enhancements (Hirsch, 2008). This process ensures continuous and effective organizational performance by using and improving employees and managers in key roles (Weathers Groups, 2008). Succession planning is a subfield of workforce planning in which critical organizational positions are determined, and employees become prepared to fill them. This involves identifying the gap between the current workforce and the one necessary for the future (Mckinney & White, 2009). Succession planning refers to the process in which potential talent for filling critical positions in the future is identified and prepared through planned training and education (Abualaei & Ghafari, 2015).

Sustainability

The concept of sustainability in organizational activities still presents a significant challenge for family businesses. Grant and Kenton (2019) defined sustainability as focusing on meeting the needs of the present without compromising the ability of future generations to meet their needs. Business sustainability can be explained as managing an organization by considering three aspects: economic, social, and environmental. It may also be called the triple-bottom-line approach (Mahajan & Montu, 2018). In essence, business sustainability is a long-term management approach that coordinates how the business adapts to dynamic economic, social, and environmental factors while maintaining a profit.
On the one hand, economic sustainability connotes the overall growth, development, profitability, and return on investment of the organization (Khan, 2014), while social sustainability depicts the overall interactions between the student, institution, and the environment in all academic exercise (empowerment, accessibility, participation, sharing, cultural identity, and institutional stability) (Beate & Erich, 2005; Adedayo *et al.,* 2016).
The importance of sustainability to organizations cannot be over-emphasized because, presently, it is considered a vital strategy for competitiveness, sustenance, and existence. Over 72% of executives in various organizations believe it aids the existence of their organization. In comparison, 32% believe it will be in the future and encourage the conservation and enhancement of an organization's resource base (Haanaes, 2017). It creates a firm interaction between human activities and the environment (Wilshusen & MacDonald, 2017).
Thus, sustainability in terms of family-owned businesses, as alleged by Ogundele, Idris, and Ahmed-Ogundipe, is the degree to which its existence can be elongated while accomplishing its purpose, which can be affected by proper succession planning (Ogundele *et al.,* 2012), ability to foresee and react to adjustments, running the business as a separate being, which requires separating individual accounts and assets from business accounts; ensuring there is a structure good enough that is independent of the proprietor to continue with the running of the business; developing, improving the human capability and furnishing the successor with the core running of the firm or business (Nnabuife & Okoli, 2017)

Components of Succession Planning

Mentoring

Mentoring has become a core concept because it has aided in selecting and grooming individuals with new skills, experience, and knowledge transfer for the sustainability and continuity of family businesses. Adeyemi, as cited in Oforbruku and Nwakoby (2015), posits that mentoring is among the few tools needed for training skilled employees, building organizational knowledge and capabilities, intelligence, and creating competitive advantage for the organization's future survival. Nnabuife and Okoli (2017) opine that the mentor protégé relationship is prevalent within family-owned businesses, ensuring the family legacy as the business thrives. The benefits are higher salary, improved job satisfaction, and better job performance.
Mentors' ability to implement formal or informal mentoring programs may lead to higher employee performance because it is an essential economic development (Mundia & Iravo, 2014). Mentoring has been identified as a possible solution to poor business leadership succession plans, a foundation to increase

competitiveness, corporate citizenship, and organizational self-efficacy. An excellent cordial relationship among the mentors and mentees leads to commitment, loyalty, and patriotic leadership as a successor of the future and higher performance of employees (Sholesi *et al.,* 2017).

Sholesi *et al.* (2017) posit that mentorship is vital for effective succession and achieves sustainable competitive advantage that most organizations do not have. A mentorship program must be implemented for a family business to sustain and retain high employee performance (Oforbruku & Nwakoby, 2015). Ugwu (as cited in Onwuka *et al.,* 2017) has asserted that for any successful organization to sustain its continuity in the business world, measures must be put in place to discover young people who might be picked from management trainee level and mentored into excellence and allow these individuals climb the management ladder to take over the leadership of the organization in future time. In other words, a family business that strives for continuity and sustainability must identify skilled and experienced personnel and implement mentoring programs.

Communication

Communication is one of the most essential elements of the management process. Adequate and proper organizational communication has always been essential to management success. Lack of clear communication is one of the biggest threats to succession planning. Ineffective communication leads to disharmony between the founder and the successor, systematically harming family harmony because of the inability to communicate the business values and succession planning goals to the next generation. This means that when there is a mutual understanding within the family, the members will feel satisfied, and this can be achieved in a situation where the successor or management team of the family business allows the adequate flow of communication, transparency, fairness, respect for one another, and equality among family members as well as other stakeholders of the business enterprise (Paul *et al.,* 2017).

Handler (as cited in Toshie, 2014) has taken on a relational view of communication, essential for studying succession processes in family firms. Firstly, the "joint action" is a relational activity that can create succession possibilities that would not have been discovered otherwise. Second, succession is a relationship process where parties adjust their behavior to the others involved. This is because it is always a relational mutual dependence between the predecessor and the successor, where the predecessor must be willing to leave the current position, and the successor must be willing to take over. While choosing a successor is a crucial attribute of succession planning, advisors note that it is insufficient. To be effective, a formal plan should be developed and communicated with key family members (Eddleston *et al.,* 2013).

Training and Sustainability of Businesses

Training is meant to develop the skills of the successor. Practical successor training prepares the successors with the requisite business skills, managerial capabilities, company knowledge, and attitudinal traits to manage a business successfully (Wee *et al*., 2015). Training is the systematic learning of the employees to perform better on the job and to handle future jobs proficiently. The benefits of training successors are that it helps them make better decisions and develop problem-solving skills effectively. Training prepares the employees to handle stress, tension, and frustration. A person gets job satisfaction through training and moves toward achieving personal goals.

Ugwu *et al*. (2017) noted that workers leave their jobs either voluntarily (retirement or to pursue new aspirations) or involuntarily (relieved of appointment or by death), and as a result, organizations are often faced with vacancies in leadership and sometimes inadequacy or lack of a knowledgeable and capable successor to fill the vacancies so created. Organizations are expected to act fast and begin planning for successors before top managers are ready for retirement and maintain that organizations must train successors before vacancies occur.

Challenges Facing Business Succession Plans

The unwillingness of founders to hand over to their successors

Past research has also indicated that Founder succession might be the most critical succession event in the life of most firms. Max Weber, the great German sociologist, was among the first to identify the importance of having the founder of an organization turn over power to a successor who could solidify the administrative structures required for the continued development of the enterprise. Ready (as cited in Muriithi, 2016) found that the founder finds it difficult to hand over power, authority, and responsibilities to successors because of their mistrust of letting others take over and dominate what they have worked so hard to develop. The fear of losing control of the business is often compounded by the thought that retiring from the firm will lead to a demotion from one's central role within the family, fear of losing an essential part of their identity (Gersick, 2006) Successful transition from founders to successors means that the founders must be willing to give up powers and authorities to others (Grant, 2010).

This means that the survivability and growth of the organizations are solely dependent on thorough, systematic succession planning. For a successful transition, the founders must identify, coach, and mentor their successors while simultaneously culturing them with their visions, missions and values.

Conflict in the planning processes

Family members play a significant role in the management and ownership succession and have a determining effect on the success of the succession process.

Family members, especially between generations, can have different personal and business goals/values, conflicting personalities, and work ethics, and these goals/values need to be clearly expressed and understood by all to avoid unnecessary stress and potential conflict among family members (Walsh, 2011).

Readiness of the successor to take over the business

Venter, Boshoff, & Maas (as cited in Wanga *et al.,* 2019) also found that the successor's succession willingness and readiness, as well as the relation between the successor and the predecessor, have a significant positive impact on performance in the process of succession.

Secrecy

Lack of information and low levels of family emotional intelligence (Poza & Daugherty, 2013). Tanzania (2010) substantiated the appreciation that the emotional intelligence of the family members within a family business, which enables decisions to be undertaken with maturity and trust, is important in enabling business growth and sustainability.

Selection of the Successor

In every family or non-family business, challenges are encountered when selecting a potential successor for the organization's continuity. The selection of a suitable successor is a determining factor of the success of the process and, thus, must be a meditated decision that is in line with the opinion of the different stakeholders of the business (Alayo *et al.,* 2016). Ward (as cited in Al-Mahayreh *et al.,* ,1and 6) posited that successor development is one of the most important characteristics associated with businesses that can survive a generational transition. The correct procedures must be followed when selecting and preparing the potential successor.

i. Selection should not be based on birthright and gender but rather on the successor's competencies, abilities, and qualifications,.
ii. The potential successor should also be interested and willing to take over the family business. It will be very difficult to persuade a potential successor to take over the business if they are not interested.
iii. Suppose the potential successor is eligible and willing to take over the business. In that case, the information regarding who the potential successor(s) will be should be communicated to all stakeholders.
iv. Failure to communicate this information may lead to inner fighting and poor support from stakeholders.

Succession Planning Methods

Succession planning can be done in two ways: utilizing, internal resources (developing talent) or acquiring external resources (buying in talent). There is no right or wrong choice when deciding which route to take when implementing a succession plan. It will depend mainly on the availability of talent within the organization. Buying talent entails that the company gets employees from the outside labor market. Buying in talent has its advantages and disadvantages. Namely, it keeps pace with changing market demands, companies acquire specialized skills, it brings in new ideas and fresh perspectives. Unfortunately, it's expensive, and the talent the company buys in is unproven.

On the other hand, the company can choose to build its internal talent pool (developing talent). This helps the development of people to the specific specifications of the company, saves money on recruitment fees, enhances career mobility and engagement within the existing workforce, and the company already knows the employee's attributions. However, there are fewer opportunities to inject new knowledge and energy into the company. Looking inward for future success can unlock undiscovered capabilities and talents of employees. These attributes may not have become apparent in their existing roles because of habit and complacency rather than a failure to invest in employee development (Seymour, 2008).

Job rotation within a company can be used to lessen the skills shortfalls. There are considerable savings to be made by offering coaching, mentoring, or further job training to existing staff.

Principles of Succession Planning

The main dimensions of a succession planning system are the following (Hills, 2013):

Organization's strategyis at the heart of a succession planning organization. Succession planning is simultaneously associated with HR and the organization's strategic direction and joins the two fields. This role makes succession planning a critical component for achieving the future goals of the organization as per its strategies.

Supporters play a crucial role in both the success and the adoption of the system. Support of succession planning systems must be focused at the highest level of the organization. However, this support for the system is not one-sided, i.e., succession planning systems provide support for the organization by training competent managers.

Talent identification and creating a talent pool involves identifying individuals with potential. The evaluations in these systems are directly based on performance, potential, and a set of desirable management and organizational capabilities.

Theoretical Review

Trait and Factor Theory

Trait and Factor Theory was propounded by Parsons in 1909. Trait and Factor Theory states that the trait theory of leadership holds that some natural personality qualities in a person tend to create and demonstrate good leadership characteristics. Although prevalent, these natural personality qualities do not necessarily indicate strong leadership skills/potential. The theory sets out to match people and occupations withgarding ttoir abilities, interests, intelligence, attitude and, aptitude. The theory also asserts that the individual's needs and values can only be fully realized when matched with jobs relevant to such needs and values. To explain his views further, Parsons proposed the following as basic steps through which an individual goes in his attempt to choose a career:

i. A clear understanding of himself, his abilities, aptitudes, intersects, ambitions, resources, limitations, and their causes.
ii. A good knowledge of the requirements and prospects of different jobs and
iii. A sound reasoning of the relationship between the above two groups of factors and the selection of a good match. This theory, therefore, states that if an individual's personality is carefully observed, better predictions can be made about his career behaviour.

Acquired Needs Theory

McClelland, a well-known psychologist at Harvard University, studied employee behavior. He used the Thematic Apperception Test (TAT) to measure employee motivation in satisfying various needs. He found out that employees craved the need for achievement, the need for power, and the need for affiliation (Kreitner & Kinicki, 2014). The Acquired Needs Theory focuses on the diversity of people and is rooted in culture. It assumes that needs are acquired or learned based on our life experiences. A strong need will motivate the person to engage in behavior that satisfies that need. Achievement is represented by the drive to excel and accomplish challenging tasks to achieve a standard of excellence. Achievement motivation depends on childhood, personal and occupational experience, and even the type of organization. According to this theory, some people have a compelling drive to succeed. They strive for personal achievement rather than for the rewards of success. They have a strong desire to do something better or more efficiently than it has been done before. Individuals high on achievement needs often make promising entrepreneurs running their businesses (Johns, 2014).

Empirical Review

Okeke (2021) examines the effect of mentoring, communication, and training on the sustainability of selected family businesses in South-East Nigeria. A survey research design was implemented. The study population was 346, while 335 were used in the analysis. The multiple regression analysis (MRA) method was used to test the hypotheses. The hypothesis results show that mentoring has a positive significant effect on the sustainability of family businesses under study. Communication has a positive significant effect on the sustainability of family businesses under study. Training has a positive significant effect on the sustainability of family businesses under study. The study concluded that sustainability positisignificant positiveion planning of selected family businesses in South-East, NigeriSoutheasty recommended that Founders establish mentoring and training programs and and keep an open line of communication on succession plans with the family members to develop the technical and managerial skills and competency of the successor to prepare him for future succession.

Olu and Onuoha (2020) investigate the relationship between succession planning and the sustainability of family-owned schools, specifically in Rivers State. The target population is the entire family-owned school in Rivers State. However, the accessible population comprises ten (10) family-owned registered/government-approved schools in Rivers State, drawn from the three senatorial districts. The population and sample size is one hundred and nine (109) due to the census study's adoption. The two null hypotheses were rejected, and the alternate hypothesis was accepted, indicating a significant positive relationship between the dimensions of succession planning (successor selection and successor preparation) and sustainability. It was concluded that family-owned schools stand a better chance of optimizing economic and social sustainability levels. Thus, the study recommends that Successor selection increases commitment to firm goals, encourages individual development, and ensures business continuity towards high sustainability. Hence, successor selection should be encouraged. Successor preparation retains and develops intellectual capital, better career development, and enhances on-the-job learning with a focus on increased sustainability. Therefore, Successor preparation should be institutionalized.

Olusola (2020) examines the influence of executive succession planning on the sustainability of SMEs in Nigeria. This research adopted a quantitative research approach using a cross-sectional design. The study population included all registered SMEs/MSMEs in Nigeria as contained in the SMEDAN database. Data

were analyzed using Descriptive statistics, while the hypotheses were tested using linear regression. Findings from this research revealed low implementation of some critical components of executive succession planning in the overall strategic plan of small and medium businesses. A finding in this study revealed that there is a significant influence of executive succession planning implementation on economic sustainability in business among SMEs in Nigeria. This study revealed that there is a significant influence of executive succession planning implementation on social sustainability in business among SMEs in Nigeria. This finding revealed that there is a significant influence of executive succession planning implementation on environment sustainability in business among SMEs in Nigeria. Based on the findings of this study, it is an irresistible fact that economic, social, and environmental sustainability among SMEs could be significantly influenced by good executive succession planning. More so, the influence of executive succession planning on social sustainability would be primarily significant

Pauline (2019) examines leadership succession and sustainability of small family-owned businesses in Anambra, South East Nigeria. The study employed the survey research design carried out in Onitsha and Nnewi commercial and industrial hubs of Anambra State. The simple random sampling technique was employed to select a sample of 298 registered small business owners. A five-point Likert structured 6-item questionnaire was adopted for data collection. The study employed Pearson Product Moment Correlation to determine the relationship between the dependent and independent variables. Also, the Paired Sample t-test was employed to verify the existence of statistical evidence proving that the mean difference between the paired observations in the hypothesis is significantly different from zero. The findings revealed that mentoring and human capital development have a significant influence on the sustainability of small family-owned businesses. The study, therefore, recommended that family business owners should identify the successor early enough and adopt mentorship as a process to equipping the successor, who must, however, willingly show genuine interest and is not coerced into the business, and adequate time should be devoted for training of chosen successors, in order to equip them with relevant skills that will make

Ezimma-Nnabuife and Ifeanyi (2017) examine the place of succession planning in the sustainability of selected Family Owned Businesses (FOBs) in Anambra State. A survey research design was adopted for the study. The population of the study consisted of 275 FOB's comprising of 50 incorporated FOBs and 225 unincorporated FOB. Complete enumeration was adopted. Data was collected through the a questionnaire and analyzed using Pearson's Product Moment Correlation Coefficient to test for relationships and a t-test to examine the mean difference. Findings revealed that mentorship has a high positive significant relationship with sustainability ($r = .858$ $p < .05$) and that there is no statistical
difference between the perceptions of selected incorporated FOBs and unincorporated FOBs on succession planning in Anambra State ($t = -218$ $p > .05$).The study concluded that mentorship is very germane in the quest to perpetuate the existence of family businesses and therefore recommended that FOB's should see mentorship as a process that is gradual and not rushed towards the end; the owner/managers of FOB's should ensure that they first of all ensure that they make the people who will take over to be genuinely interested in the business - That owner/founders should see succession as a process of sustaining their businesses for long rather than a process of relinquishing power and control.

METHODOLOGY

The study adopted the descriptive survey research design for analyzing the respondents' opinions.The Primary and secondary sources of data collection were used. The study's target population consists of 23 staff of Eco Bank Plc., Umuahia. In order to pick the sample, the researcher makes use of a random sampling technique. The entire staff of Eco Bank Plc. Umuahia was used as a sample size. Since the population is not up to 100. The primary instrument used was to collect data by the researcher was a well structured questionnaire. In designing the questionnaire, the researcher use five (5) point Likert scale questions issued to the respondents to choose options best suitable to them critically. The data generated was analyzed using descriptive statistics, frequencies, and percentages. The hypotheses were analyzed with a simple regression model.

Model Specification

$Y = f(X_{1,})$……………………………………………………………………… 1

$Y = b_0 + \beta_1 X_1 + et.$ ………………………..……………………….................…… 2

Where:

Y = Organizational Effectiveness

X_1 = Mentorship

β_0= Intercept

$\beta_{1-}\beta_3$ = Parameter estimate

ei = error term.

For hypothesis 2

$Y = f(X_{1,})$…………………………………………………………………… 3

$Y = b_0 + \beta_1 X_1 + et$ ……………………………………………………,................4

Where:

Y = organizational efficiency

X_1 = Communication

β_0= Intercept

β_{1}-β_3 = Parameter estimate

ei = error term.

For hypothesis 3

$Y = f(X_{1,})$…………………………………………………………………… 5

$Y = b_0 + \beta_1 X_1 + et$ ……………………………………………………,................6

Where:

Y = Organizational Productivity

X_1 = Training

β_0= Intercept

β_{1}.= Parameter estimate

ei = error term

RESULTS AND DISCUSSIONS

As shown in the age row in Table 1 above, most of the respondents 45% fell into the 31 – 40 age brackets, followed by 35% of the respondents who fell between 21– 30 of age, the least were 5% of the respondents who were at above 50 and Less than 21 years. This implies that the majority of the respondents were young people. The gender row from Table 1 revealed that the most of the respondents, constituting 60%, were male, as against 40% were female staff of Eco Bank Plc., Umuahia, Abia State. As shown in the marital status row in Table 1 above, the majority of the respondents, constituting 50%, were married, as against 40% of the respondents who were single, and the least were those who were divorced, constituting 10%. Table 1 further reveals the level of education of the staff of Eco Bank Plc., Umuahia, Abia State. From the frequency, most of the respondents constituting 60% of the respondents were B.Sc./HND holders, followed by MSC/Ph.D. holders with 30%, while the least were ND/NCE holders constituting 10%. The table above further explained that most of the respondents (45%) received a monthly salary of between >₦100,000 – ₦130,000, followed by 40% of the respondents who received a monthly salary of ₦61,000– ₦90,000. The least were those without a monthly income of ₦130,000 and above, representing 15% of the sample. The last row in Table 1 explains the number of years they have worked as staff of Eco Bank Plc., Umuahia, Abia State. As stated in the frequency, most of the respondents, constituting 35%, have worked as staff of Eco Bank Plc., Umuahia, Abia State between 16-20years followed by those who have worked as staff of Eco Bank Plc., Umuahia, Abia State between 6 -10years with 30% and the least were those who have worked staff of Eco Bank Plc., Umuahia, Abia State above 20 years and less than 5 years with 5%.

Table 1: Distribution of Socioeconomic characteristics of the respondents

Variables	Frequency	Percentage
Age		
Less than 21 years	1	5
21 – 30	7	35
31 – 40	9	45
41 – 50	2	10
Above 50	1	5
Total	20	100.
Gender		
Male	12	60
Female	8	40
Total	20	100
Marital Status		
Married	10	50
Single	8	40
Divorced	2	10
Total	20	100
Qualification		
FSLC	-	-
SSCE	-	-
ND/NCE	2	10
B.Sc./HND	12	60
M.Sc./MBA	6	30
Total	20	100
Monthly Income		
0 >₦30,000	-	-
₦31,000 – ₦60,000	-	-
₦61,000– ₦90,000	8	40
>₦100,000 – ₦130,000	9	45
₦130,000 and above	3	15
Total	20	100
Number of Years		
< 5years	1	5
6 -10years	6	30
11–15years	5	25
16-20years	7	35
Above 20years	1	5
Total	20	100

Source: Field Survey, 2023

Research Questions 1: What are the effects of mentorship on the organizational effectiveness of Eco Bank Plc, Umuahia?

Table 2: Participants responses on the effect of mentorship on organizational effectiveness of Eco Bank Plc, Umuahia

Effect of mentorship on organizational effectiveness	SA	A	N	D	SD	Total	X	Decision
The exchange of knowledge affects organizational effectiveness	50	24	6	2	1	83	4.15	Accepted
Communication and accessibility affect organizational effectiveness	55	20	6	2	1	84	4.2	Accepted
Teaching affects organizational effectiveness	45	24	9	2	1	81	4.05	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data in Table 2 indicated the respondent's responses on the effect of mentorship on the organizational effectiveness of Eco Bank Plc., Umuahia, Abia State. The result revealed that all the items were above the acceptance benchmark of 3.00, which shows that all the items were accepted by the respondents the effect of mentorship on organizational effectiveness of Eco Bank Plc., Umuahia, Abia State.

Research Questions 2: To what extent does communication affect the organizational efficiency of Eco Bank Plc., Umuahia?

Table 3: Participants' responses on the extent to communication affect the organizational efficiency of Eco Bank Plc., Umuahia

Effect of communication on organizational efficiency	SA	A	N	D	SD	Total	X	Decision
Encoding affects organizational efficiency	50	24	6	2	1	83	4.15	Accepted
Medium of transmission affects organizational efficiency	55	20	6	2	1	84	4.20	Accepted
Decoding affects organizational efficiency	45	24	9	2	1	81	4.05	Accepted
Feedback affects organizational efficiency	60	16	6	2	1	85	4.25	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data in Table 3 indicated the respondent's responses on the effect of communication on organizational efficiency of Eco Bank Plc., Umuahia, Abia State. The result revealed that all the items were above the acceptance benchmark of 3.00, which shows that all the items were accepted by the respondents that effect of communication on organizational efficiency of Eco Bank Plc., Umuahia, Abia State.

Research Questions 3: How does training affect the organizational productivity of Eco Bank Plc., Umuahia?

Table 4: Participants responses on the effect of training on organizational productivity of Eco Bank Plc., Umuahia

Effect of training **on organizational productivity**	**SA**	**A**	**N**	**D**	**SD**	**Total**	X	**Decision**
On-job-training affects organizational productivity	50	24	6	2	1	83	4.15	Accepted
Off-job-training affects organizational productivity	55	20	6	2	1	84	4.20	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data in Table 4 indicated the respondent's responses on the effect of training on the organizational productivity **of** Eco Bank Plc., Umuahia, Abia State. The result revealed that all the items were above the acceptance benchmark of 3.00, which shows that all the items were accepted by the respondents the effect of training on organizational productivity of Eco Bank Plc., Umuahia, Abia State.

Test of Hypotheses

$H0_1$: Mentorship has no significant effect on the organizational effectiveness of Eco Bank Plc, Umuahia, Abia State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712[a]	.689	.631	1.131

a. Predictors: (Mentorship)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	3.423	2	1.711	3.760	.021[b]
1	Residual	8.20	18	0.455		
	Total	11.62	20			

a. Dependent Variable: organizational effectiveness

b. Predictors: (Constant), Mentorship

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	1.290	.102		3.499	.011
1	Mentorship	1.012	.122	.031	8.295	.001

a. Dependent Variable:: organizational effectiveness

The result of the coefficient of multiple determination (R^2) was 0.689, which implies that changes in the independent variable explained 69% of the variations in the dependent variable, while 46% were unexplained by the stochastic variable, indicating goodness of fit of the regression model, adopted in this study which is statistically significant at 1% probability level.

The coefficient of mentorship was statistically significant and positively related to organizational effectiveness at a 1 percent level (8.295***). This implies that a unit increase in mentorship led to a corresponding increase in organizational effectiveness. With a positive F-value of (4.99) showing that there is a significant, we conclude that mentorship has positive and significant effects on the organizational effectiveness of Eco Bank Plc., Umuahia, Abia State**.**

Hypothesis 2

$H0_2$: Communication has no significant effect on the organizational efficiency of Eco Bank Plc., Umuahia, Abia State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567[a]	.553	501	1.211

Predictors: (Communication)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	9.132	2	4.566	10.82	.000
1	Residual	7.60	18	0.422		
	Total	16.73	20			

a. Dependent Variable: organizational efficiency

b. Predictors: (Constant), Communication

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	1.178	.129		9.131	.000
1	Communication	1.625	.190	.021	8.552	.001

a. Dependent Variable:: organizational efficiency

The result of the coefficient of multiple determinations (R^2) was 0. 553 which implies that changes in the independent variable explained 55% of the variations in the dependent variable, while 45% were unexplained by the stochastic variable, indicating goodness of fit of the regression model adopted in this study which is statistically significant at 1% probability level.

The coefficient of communication was statistically significant and positively related to organizational efficiency at a 1 percent level (5.116***). This implies that a unit increase in on- communication led to a corresponding increase in organizational efficiency. With a positive F-value of (10.82) showing that there is a significant, we conclude that communication has positive and significant effects on the organizational efficiency of Eco Bank Plc., Umuahia, Abia State.

Hypothesis 3

$H0_3$: Training has no significant effect on the organizational productivity of Eco Bank Plc., Umuahia. Abia State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.564	.532	.512	1.28

a. Predictors: (Training)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	5.109	2	2.554	2.538	.501[b]
1	Residual	6.12	18	1.0060		
	Total		20			

a. Dependent Variable: organizational productivity

b. Predictors: (Constant), Training

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.210	1.412		0.856	.821
	Training	1.131	1.110	.011	1.0189	.521

a. Dependent Variable: organizational productivity

The result of the coefficient of multiple determination (R^2) was 0.55, which implies that changes in the independent variable explained 55% of the variations in the dependent variable, while 45% were unexplained by the stochastic variable, indicating goodness of fit of the regression model, adopted in this study which is statistically significant at 1% probability level.
The coefficient of training was statistically significant and positively related to organizational productivity at a 1 percent level (1.0189). This implies that a unit increase in training led to a corresponding increase in organizational productivity. With a positive F-value of (2.538) showing that there is a significant, we conclude that technological training has positive and insignificant effects on the organizational productivity of Eco Bank Plc., Umuahia. Abia State.

CONCLUSION

The issue of succession planning is a significant problem within companies and commercial banks in Nigeria and the world. Although most commercial banks are run by experts and small management teams, very few commercial banks have proper succession planning in place. The lack of proper succession planning can have the direct effect of causing the collapse of businesses, especially when key players leave the business upon retirement or in pursuit of other options or careers. The exit or exodus of key staff can make a business vulnerable and diminish its worth, as investors will not invest in a business that is not sustainable. Succession planning is one of the most pressing issues within the company's corporate governance sphere. Most commercial banks in the country are not placing enough emphasis on cultivating the next generation of leaders who will be required to bring sustainability to their companies in the future. MostMostcommercial banks in the country make the the mistake of promoting employees to leadership roles without thoroughly evaluating the true capabilities of these individuals. In conclusion, effective succession planning enhances organizational performance. Based on the findings of this study, the study recommends that banks should design a proper succession plan where the junior staff will be mentored effectively to enhance organizational effectiveness. Also, management of the studied bank should also create an effective communication medium between the junior and senior staff in the bank for easy communication flow. Finally, management of the studied bank should take a critical look at the training programs designed by the bank for training and re-training of their staff.

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BUIDING A MODEL OF SUSTAINABLE BUSINESS MANAGEMENT FOR ACHIEVING FUTURE CORPORATE SUCCESS IN AFRICA

[1]Ihemeje, Jecinta C., [1]Ekeagwu, Innocent C., [2]Chima, Veron U. and [3]Zuberu, Emmanuel
[1]Michael Okpara University of Agriculture, Umudike
[2]Ave Maria University, Piyanko
[3]Nasarawa State university, Keffi

ABSTRACT
Endogenous African business is business that aims to create and sustain competitive advantage by integrating Africa's endogenous natural resource advantages and the economic, social and cultural systems that build on them with modern business practices. It has the potential to fuel economic growth, revitalize rural areas, contribute to food security and healthy diets, as well as provide role models of which Africans can be proud of. These businesses deserve our attention in the next two decades of scholarly research and education on African business. Africa is currently undergoing a transition that is unprecedented in its history. For the first time, the demand of urban population pulls business development, thus creating economies with higher levels of specialization than before. These businesses tap into the natural resources and the social, economic, and cultural systems that build upon them. These resources and systems make the African business environment different from business environments in other parts of the world. Furthermore, the endogenous businesses have access to knowledge on how to manage modern businesses in the formal sector of the economy. In combination with African resources and systems, such knowledge enables them to create and sustain competitive advantage in modern dynamic marketplaces. The study utilized the survey research design and a five-point Likert scale to measure the extent to which the various respondents agreed or disagreed with the issues raised. The multiple regression was used to estimate the cause-and-effect relationship between the dependent variable of endogenous African businesses and independent variables of sustainable business management. The correlation analysis was used to ascertain the degree or strength of a relationship between the variables. Based on the findings of the research, the study concluded that sustainable business management indices of gaining a competitive advantage, protect your brand, improve profit with a growing market, make a positive impact on climate change, seamless regulation compliance, mitigating risk with ease, has positive but insignificant impact on the advancement of endogenous African businesses. The paper identified the challenges faced by endogenous African business and recommended a way out of them.
Keywords: Sustainable business, Management success, competitive advantage, climate change, regulatory compliance, brand protection

INTRODUCTION

As the world becomes increasingly aware of the impact businesses have on society, new ideas about ethics and sustainability are bringing about widespread change. Individuals, investors, and even governments are now asking businesses to take responsibility for their actions and demonstrate a commitment to operating in an ethical and sustainable way. In response to this growing trend, organisations of all sizes are integrating principles of sustainability into their business practices. Business sustainability management helps companies identify potential risks, disclose information transparently, invest in socially responsible investments and address other risks related to being sustainable. Read on to learn more about why sustainable business management is important for your company's future success. Evidence shows us that sustainability management can lead to more efficient and profitable corporations. So, what exactly *is* corporate sustainability management (CSM,) and *how* does it lead to better and more sustainable businesses? This paper builds a model of sustainability management within the context of the corporate world and the benefits of prioritizing it within your organization. Changing your company's practices to be more sustainable is not something that can be done overnight. Taking small steps to adjust your business's course can help you transition to more sustainable practices with less risk and disruption to your daily operations. To begin, you'll want to assess your current practices and identify changes that could help your company move towards a more sustainable path. To understand how to implement the necessary changes, you can learn more with a business sustainability management course. Online sustainability courses are an excellent way to increase your knowledge in order to make the best changes for your company. This study will examine the importance of sustainability within the business, and how you can apply it. It's important to remember that every business is unique and different from each other, so you need to learn how to apply business sustainability management practices to your business. Expert courses can give you the tools and skills you need to make this happen. At the very least, it will be worth looking into.

Corporations increasingly devote resources and strategies towards sustainability and protecting the natural environment. Many factors appear to drive companies towards investing in practices and departmental structures that are referred to and aid corporate sustainability management. In today's world, practices of corporate sustainability management include ethical questions and dilemmas. For example, the fundamental question of "What does it mean to be sustainable?" asks corporations to reflect on the end goal of sustainability and raises questions of standards, both internally and within the industry, each company operates in. Asking these basic questions seems inevitable because our understanding of what sustainability is and what it is not has a significant impact on how we identify problems and come up with solutions. Corporate sustainability management is where business meets sustainable practices. It is the activity of managing a corporation's impact on the three key bottom lines - profit, people, and the planet - so that all three can coexist and flourish well into the future. Sustainability management underpins a corporation's long-term viability, as it prevents rather than reacts.

A growing number of corporations from a wide range of industries, including transportation, utilities, consumer goods, and real estate, are pursuing sustainable management business goals. What is so special about the African continent that affects business development? A quick glance at a globe or world map is sufficient to see that Africa's most typical characteristic is that the orientation of its main axis is north–south (Uribe *et al.*, 2018). For Africa, this orientation comes with at least three important features.

First, the landmass covers several climatic zones and therefore comes with a huge natural diversity (UNESCO 2020). Different climates typically produce different vegetation and the vegetation in turn feeds different species of small and larger animals. Africa therefore has a remarkable variety of plants and wildlife (Meredith, 2014). If human life is a form of adaptation to natural conditions, it should not come as a surprise that many Africans moved to places where nature treated them relatively well for some reason. Communities logically would emerge in places where they could use the local natural resources in a way that helped them to survive and improve their lives. Open waters with good fishing grounds started to host fishing communities with specialized practices. Pastoralist cultures that specialized in lifestyles based on livestock herding emerged on the large plains in East Africa and below the Sahara. Bantu-speaking population spread across the fertile grounds across the continent to establish new farming communities (UNESCO 2020). As such, the different natural resources became a basis for different lifestyles and practices.

Second, biodiversity also has a dark side. Uribe *et al.* (2018) argues that throughout history, Africa had "an exceptional human disease environment", meaning that it had relatively frequent occurrences of climate-related diseases, such as malaria. This frequency of disease outbreaks, in turn, constrained population growth. The lower level of population density is further caused by environmental constraints in the growth of agricultural outputs and relatively good conditions for nomadic pastoralism compared to agriculture (Sauve *et al.*, 2016). Food production in that sense constrained population growth. As a consequence, the communities living at different spots on the continent were often relatively isolated. With people living in relatively remote communities where they needed to develop their own ways of dealing with their environment, the continent is also highly diverse in cultural terms. This heterogeneity is, among others, evidenced by the 1250 to 2100 different languages on the continent (UNESCO , 2020) but can also be witnessed in the different food crops, processing techniques, end products, tastes, and preferences.

Meanwhile, on the east–west-oriented Eurasian continent, food production became the basis for the first civilizations. These emerged in places that were suitable for agriculture since if farmers produced more than they needed for their own families, they could pay some share of their surplus as a tax to local rulers. Simply stated, if the place was, relative to where people could move next, pleasant enough to live, they accepted the constraints to their freedom, such as paying taxes and serving in armed forces (Strauss, 2016). Establishing a rule of law brought business to a higher level. The Romans, for example, conquered new tribes and assimilated them into their empire to strengthen trade. Once the conquered people had access to a market, they could sell their produce for money. The money gave them access to other goods that constituted an improvement in their standards of living (Rahim, 2017). As such, businesses, and societies in general, could step by step become slightly more advanced and specialized.

Many early civilizations emerged in and around the southern ranges of the Eurasian landmass, almost creating a "belt" with the Roman Empire, Greece, and Egypt in the West, such civilizations as Babylonia and Persia in the Middle East, and the Moghul Empire and China's Han Dynasty in the East, just to mention some. They appeared in places with relatively good conditions in terms of the climate, the presence of rivers for transport and irrigation, and the absence of harsh conditions that make human life difficult. Jointly, they also had the advantage of being connected (UNESCO 2020). Over time, trade routes emerged and exchange started between the different regions. Goods and also ideas, practices, crafts, and technologies spread from the East to the West and back (Rahim, 2017). The lessons learnt in one place often held some level of relevance in other places because the conditions were roughly comparable. As

such, harvests could increase and room was created for higher levels of craftsmanship and other more specialized business activities.

This subject brings us to the third consequence of Africa's north–south orientation, which is that the diverse living conditions also affected the potential to learn from others. Africa was often only weakly included in the trade between the old civilizations that could learn from each other. Meanwhile, the Touareg, for example, could offer important lessons on how to survive in the Sahel, but these insights were of little relevance to people living in Central Africa coping with very different conditions. In conclusion, since the geography of Africa is different from that of its closest neighbor Eurasia, different developmental patterns emerged. Despite the richness of its natural resources, development in Africa was hindered by climatic factors that made human life more difficult and the lessons of neighbors less relevant. Not surprisingly, different developmental patterns also create different types of business.

Since mother Africa itself gave birth to humanity, the first businesses "avant la lettre" must have emerged in Africa. A business can be defined simply as "an organization or economic system where goods and services are exchanged for one another or for money" (Uribe *et al.*, 2018). Some very early businesses therefore must have taken the form of people trading meat and skins from their hunting trips for fruits and vegetables foods found by gatherers.

In the presence of a wealth of diversity and relatively large distances between communities, it is not surprising that trade became the dominant business activity. Trade directly leverages the advantages that come with a large variety of resources. The logical way of creating value was therefore simply to explore what was to be found elsewhere. This must often have led to new discoveries of new fruits, vegetables, gems, practices, et cetera. Because communities were living relatively far away from each other, the discovery of something that was valuable to someone else easily led to a sustainable trading business. In his social network perspective on competition, UNESCO (2020) calls such a position a structural hole because the supplying and the demanding communities do not know each other, and the trader in fact creates a monopoly for herself or himself. In some parts of Africa, trade is therefore still second nature as even people with paid jobs run trading businesses on the side. Most indigenous African languages also do not seem to have words that indicate "business," other than words that literally mean "trade."

With the trade activities of Africans, marketplaces emerged. People started trading at specific places, such as where small bush roads meet larger, more accessible roads. Bigger marketplaces would emerge where two accessible roads cross, and probably the largest marketplaces emerged at the centers of trading systems, as in capitals where goods could be traded with people from long distances away (Uribe *et al.*, 2018). Through these networks of marketplaces, Africa got connected with the East–West trade routes that Marco Polo traveled and with the seafarers on the Atlantic and Indian Oceans. Goods could Rahim, 2017), like gold, diamonds, ivory, textiles, and salt (UNESCO, 2020).

Places that were remote but still connected to markets could specialize further. In that respect, the early African businesses were not organizations that existed separately from other forms of social organization. Families that were running successful businesses could bring the business to a higher level by involving other community members or extended families and clans. Family ties, social pressure, and even violence was used, not so much to conquer land, as in Europe, but to control labor forces (and with them secure the know-how of the business). Their specialized knowledge in the usage of local resources provides them with a comparative advantage in the marketplace (Sauve *et al.*, 2016) that allowed them to grow.

Most "businesses" were therefore not independent organizations but were directly related to families and clans. Kingdoms, such as Ashante, Zulu, and Buganda, were often based on controlling trade routes and keeping exchange going (for examples of early African states, (Strauss, 2016). Trade was important because it ensured that people would stay. Most of the pre-colonial African states therefore had a clear "business model" regarding the types of trade they controlled as a source of income. Despite the efforts, the lack of control over people made them more vulnerable than the states in the Eurasian belt and, generally speaking, they would not last as long as some of their Eurasian counterparts.

While development started to accelerate in approximately 1800 with the industrial revolution in Western Europe, international trade also intensified. The level of business activity in Africa grew with it and the first signs of a more diversified economy started to appear during the last decades of the nineteenth century (Strauss, 2016). The period of colonization that came next ended the organic growth of African businesses. Coming from a part of the world where not labor but land was the scarce production factor, the colonizers started to draw state borders on the map. From their spheres of influence, they sourced natural resources for the emerging European industries that traded back their efficiently produced goods (e.g., Hopkins, 1973). The variety of Africa's natural resources was not used to its full potential in this business model, while the new businesses in such places as Kano in current Nigeria stopped before they had a chance to flourish (Strauss, 2016).

In summary, notwithstanding that in principle any type of business can be conducted in Africa, the traditional African business was more than just a business that happened to be in Africa. They tapped into

Africa's endogenous natural resource advantages and into the economic, social, and cultural systems to overcome the inherent labor scarcity and facilitate exchange. These characteristics may help us to recognize the modern endogenous African businesses.

The small size and relatively low level of proficiency that have characterized African businesses for a long time are now changing. Three current factors cause structural changes. First, with the growth of the population in Africa, in particular in the cities, for the first time in history markets are emerging that generate sufficient domestic demand for business to attract greater levels of specialization and competition (Economist, 2010). The growing African demand sometimes is an underestimated factor in Africa's macro-economic development (Frankema & van Waijenburg, 2018). Many Chinese businesses, which are often suspected to be there to produce for the Chinese market, are actually attracted by the growing size of African domestic markets (UNESCO, 2020). In other words, it is far more independent from foreign buyers than in previous periods of growth (Strauss, 2016).and the growing demand will now lead to new businesses that will start seeking different ways to survive and thrive.

Second, next to the growth of domestic demand, Africa is also becoming more integrated in the global trade of capital and goods. With the growing population worldwide, Africa's resources are needed more than ever to fuel the development not just for Africans, but for everyone (Burgis, 2015). While in the past investors might have been scared off by high institutional risks, such risks no longer outweigh the gains associated with natural resources, such as metals, fishing grounds, and agricultural lands (Strauss,2016).

Third, compared to the past, technology is in many ways no longer a frontier. We have the technologies to communicate without wires, to grow plants in deserts, to adapt to climate change, and to produce enough proteins and vitamins to provide food for the rapidly growing populations. In urban areas, we can grow leafy vegetables vertically along the walls of skyscrapers and apartment buildings. We can manufacture consumer goods that are printed with 3D printers that get their power from solar panels or biogas. If spare parts are needed, we can send a drone with supplies. It is not that everything is on hand and ready to be implemented, but the point is that Africa can step in at a level of development in which technology is often no longer the barrier. As such, it creates what Chandy and Narasimhan (2015) call "condensed change" since the technological steps of development that took centuries in other parts of the world can be taken in Africa over the course of one generation or less.

The technological progress is important also for another reason, namely, that it has made life in Africa more bearable, at least if we follow such indicators as life expectancy and infant mortality (United Nations, 2016). This is a break from the past because Africa can now build more on the knowledge of others. This is because climatic differences are less relevant in economies that are more developed. The inherent disadvantages of Africa compared to Eurasia are rapidly becoming irrelevant. Therefore, compared to the past, the population density is increasing in Africa, and so is the access to relevant knowledge and information. The factor that is stable over time is that Africa still has a rich natural environment to build businesses on.

Conceptual framework

In essence, an endogenous African business integrates relatively unique natural resources with modern business knowledge and skills. Business knowledge is one of the knowledge-types that is now becoming more available, including all its sub-disciplines, such as management, marketing, and finance. The endogenous African businesses, and the schools and universities supporting them, can benefit from past developments in international business schools.

Business knowledge may help to create value from Africa's diverse resource endowments and its social, economic, and cultural systems. In that respect, a new generation of Africans is arising that has received a modern business education or otherwise acquired a substantial amount of knowledge on how to manage a modern formal-sector business. They are also on top of the market opportunities that arise in their dynamic environments. By knowing these opportunities, they may recognize the resource potential of the rural areas. Because they still have the social and/or cultural ties that are in many cases needed to effectively do business in these areas, they also have the potential for stable access to such resources. Standing with one foot in their African heritage and with the other in the modern business world, they are uniquely positioned to develop strategies and business models that tap into the natural resource endowments. Following these insights, I define the endogenous African business as "[a] business that aims to create and sustain competitive advantage by integrating Africa's endogenous natural resource advantages and the economic, social and cultural systems that build on them with modern business practices."

Given that the factors discussed above come together now, it is not surprising that we see increasing more endogenous African businesses arising. For example, the Sanle factory in Burkina Faso dries mangoes, which is a fruit that the country produces more of than it can consume. The company sells the dried mangoes to supermarkets in the growing cities in several French-speaking countries of West Africa and it exports them to European wholesalers. Drawing on the knowledge shared by foreign buyers, the company

clearly develops a competence in matching the quality requirements of foreign markets with its sourcing from small farmers in rural Africa. As another example, the fattening lots near Adama in Ethiopia purchase livestock at markets in pastoral areas and resell it to slaughterhouses and exporters that target the nearby Arab market. Additionally, these businesses are typically positioned at a place where they need to understand the social and cultural contexts of the pastoralists and the relatively modern value chain downstream. The wildlife parks across sub-Saharan Africa (but probably mostly in South Africa) directly draw on Africa's biodiversity, which they make available for the rapidly developing tourism industry, while simultaneously contributing to rural development and the protection of natural resources (Strauss, 2016). Consumer service companies, such as Kaldi's in Ethiopia or Melvin's Tea in Kenya, use commodities in which their countries are traditionally strong, respectively coffee and tea, to create endogenous value propositions that directly compete with foreign entrants, such as Starbucks. In West and East Africa, several breweries that used foreign lager beer recipes based on barley are now brewing with endogenous alternatives, such as locally produced sorghum.

These companies all use modern business practices to create value from natural resources, often making connections to rural areas. As much as their business models may vary, their African signatures are unmistakably present.

The current wave of growth will change Africa more than in any other period of change in its history. The most important factor is that the population growth creates a demand that justifies a much more diversified economy than before. Obviously, this mission can also be accomplished by "exogenous" African and foreign firms that enable the growing middle classes to live "Western" lifestyles. Money can be made by leveraging low labor costs in sweatshops. Investment capital can be used to grow the technological bases of support industries in new brain parks. Certainly, all these scenarios can, and probably will, take place to some extent. The endogenous businesses can also contribute to the growth and there are several good reasons to support them.

First, because African businesses typically make use of African resources related to African geography and culture, they are deeply engrained in African systems, and contribute to the development of African economies (Uribe *et al.*, 2018).). Because their resources are unique and difficult to imitate, they can create and sustain competitive advantages. As such, they contribute to a more refined, diversified and stable economy. Second, endogenous firms strengthen ties with and create new opportunities in the often-depopulating rural areas. Third, they contribute to food security because they may make traditional diets available and attractive to the growing urban populations. They also make rural areas more vibrant, thus strengthening food production in general. Fourth, because their resources are difficult to imitate, the natural resources upon which they build their competitiveness may be valued more and thus receive more preservation against overuse and depletion.

Fifth, once such firms become significant contributors to local and national economies, they can put pressure on administrators to create supportive business environments that will further foster growth. Sixth, endogenous firms reward creative entrepreneurs, and they are potentially gender-neutral. As such, they can counter gender imbalances. Seventh, let us not forget that the existing (exogenous) businesses are not without problems. Many established industries across the world eventually become unsustainable because they over-exploit natural resources. The endogenous firms can create alternative models for more sustainable economies. Finally, endogenous firms are firms to be proud of because they prove to new generations that not everything from abroad is better.

Endogenous African firms also present interesting research opportunities. Because they operate in a rapidly changing and challenging context, their value-creating processes, learning patterns, competences, and resources differ from businesses in high-income markets. Studying them will enrich business theories since we may discover new boundary conditions and moderators to our theories (UNESCO (2020). Ingenbleek *et al*. (2013). Such context-specific theories are still scarce in the African business literature Strauss (2016). Therefore, the next logical research directions are to further explore the theoretical bases of the endogenous businesses and to bring examples to the forefront, such as through case study research. Role models are particularly important now and case studies can create such role models. Additionally, longitudinal research is important to trace the development of African businesses over time.

These studies may be at the root of new important classroom materials. Recognizing the uniqueness of African business also has consequences for what we teach African business students. It suggests that students should learn theories and read cases to which they can relate (and perhaps be proud of). Just think of the millions of African children who aim to follow in the footsteps of professional African football players in the big competitions in Europe. If only a small percentage of their time and energy is channeled toward following role models in successful endogenous African businesses, Africa may be at the dawn of a bright future.

Since the *Journal of African Business* aims to provide "valuable insights into successful business techniques and strategies for the African business arena," it is probably the most logical host for these contributions

(*Journal of African Business*, 2018). Hence, I think that it is worthwhile to work on this subject for the years to come.

There are proven market benefits for corporations that prioritize CSM activities, including improving their long-term company value and the capital market response to the disclosure of earnings, in addition to several other benefits. Let's explore four key benefits of embracing corporate sustainability management.

Investors Favor Earnings News From The CSM firms:A recent study found that both the abnormal trading volume and the stock return volatility around earnings announcements for corporations with CSM reporting are significantly higher than those for non-CSM companies, which means that CSM organizations tend to announce earnings news in a timely manner and are more likely to provide initial earnings announcements when compared to non-CSM companies. Interestingly, the CSM corporation's earnings quality itself, as represented by earnings volatility, is relatively lower.

Improved Corporate Performance: From the stakeholder value perspective, this study also sheds light on the previously unexplored area regarding the link between corporate sustainability management and a corporation's information ecosystem by highlighting that CSM reporting coincides with an improvement to the earnings disclosure practices. This, in turn, leads to an enhanced market response to earnings announcements from CSM corporations. This research provides consistent evidence that should encourage more firms across the globe to adopt corporate sustainability management practices if they haven't done so already. Mitigate Risk With Ease: Robust corporate sustainability management also makes it possible to identify and manage risk to the business quickly. In addition, scenario analyses allow CSM firms to assess which assets within the business are most at risk, including throughout their supply chain, if applicable.

Seamless Regulation Compliance: Depending on what country your corporation operates in and what industry they form a part of, there will be regulations and standards you will need to comply with. Corporate sustainability management provides businesses with the framework to collect comprehensive operational data and insight for reporting purposes and even set custom emissions factors if, for example, there is a fixed internal carbon price. Methodological guidance and transparent, auditable calculations included in an emissions factor database can help CSM firms meet EPA, IPCC, and GHG Protocol standards and more with ease.

Gain A Competitive Advantage: Acting sustainably is not only a way of doing business in a more ethical and socially responsible way, but it can also help you gain a competitive advantage in your industry. Consumers are increasingly interested in purchasing sustainable goods, so this can be an opportunity to increase your customer base. By meeting sustainability standards and gaining recognition for your sustainable practices, you could attract new customers and increase sales while also reducing costs. This could help you stay competitive in your industry while also satisfying customer demand for sustainable products and services. A competitive advantage will give you more control in the market and allow you to create more products to the market's specifications. You will gain an advantage if you are aware of what your customers want and expect. Sustainability is important to the modern customer, and it is ethically the right way for your business to operate, so it works well here.

Protect Your Brand: Businesses can benefit greatly from sustainable practices that include reducing their impact on the environment and improving their relationship with customers, stakeholders and the community. When you make a commitment to sustainability, you can protect your company's brand and reputation by taking a proactive approach to addressing risks related to sustainability and creating a safer and healthier environment for your workers and other people in the supply chain. Your brand is important as it impacts how everyone, internally and externally, views the entire business. It's possible that a damaged brand will put off some customers and partners from working with you in the future. If you are operating sustainably, then that will go a long way in protecting your brand.

Improve Profits with A Growing Market for Sustainable Goods: Sustainable products are those that have reduced environmental impacts or have reduced reliance on non-renewable resources. Sustainable products and services are a growing and lucrative market, and meeting sustainability standards can help you meet customer demand for such products. Many consumers are also willing to pay more for sustainable products. By meeting sustainability standards and disclosing your sustainable practices, you can open up new markets, increase sales and improve profits. It's possible that opening new markets will lead to increased amounts of innovation within the business. This innovation could help you to create new products and offer new opportunities to attract customers. In the end, you may find that you are becoming a market leader, and will be able to attract more business in the future. This can help you to be more innovative going forward and create unique products and come up with unique concepts.

Make A Positive Impact on Climate Change: Businesses can reduce their carbon emissions and make a positive impact on climate change by making changes to their operations, such as reducing energy use and increasing the use of renewable resources. By integrating sustainable business practices into your company and making changes to reduce emissions, you can make a positive impact on climate change. If you're not sure what your business can do to make a positive impact on climate change, then consider looking at your

competitors, and other businesses within the industry. This will help give you more relevant information and data that you can analyses, that will help you make more informed decisions in the future regarding climate change.

All entrepreneurs face some challenges but not all entrepreneurs face the same challenges. Indigenous entrepreneurs face some challenges that those in the mainstream business sector do not, and the challenges faced by Indigenous entrepreneurs differ again, depending on factors that are unique to Indigenous entrepreneurs. For example, an entrepreneur setting up a business on-reserve may be impacted by the degree of remoteness and size of the community whereas an Indigenous entrepreneur in an urban setting may be impacted by the absence of home community support. In this article, we take a look at both business and social challenges for Indigenous businesses. Business and social challenges Indigenous entrepreneurs may face:

Access to equity or capital: Access to equity or capital is a key component of business development for non-Indigenous and Indigenous businesses alike. However, the challenges for Indigenous businesses, particularly those on reserves, to raise the capital to begin, support or expand their business is considerable and runs from there not being a local bank: "...the vast majority of Aboriginal communities do not have a bank within their boundaries. Notably, as of this year, the four major banks in Canada (i.e., the Royal Bank of Canada, the Bank of Montreal, the Canadian Imperial Bank of Commerce, and Scotiabank) collectively have less than 50 Aboriginal branches, banking outlets, or banking centres located on-reserve. Amongst the many impacts of this, individuals who have limited access to mainstream financial institutions often have no or poor credit scores, which exacerbates the challenges of accessing financing from these institutions. to the constraints of the *Indian Act.* Section 89 of the *Indian Act* prohibits the use of reserve land as collateral - banks are reluctant to provide loans if assets cannot be seized in case of default. On many reserves, except some that have developed self-government agreements, the house may be owned but the land is not – therefore it cannot be sold - which makes it impossible to build up equity in your home, as is possible for non-Indigenous people. Even on those reserves where homes can be owned, there is a disparity between the equity in a house on a reserve compared to a house not on a reserve.

Access to business networks: Many of the smaller communities do not have Economic Development departments or community-run businesses; there may be no one in the community to mentor the owner of a start-up business and it's just as unlikely that there will be business networks to tap into for support or marketing. Access to skilled employees: Communities that have little or no business development are less likely to have a skilled workforce. There has been an increase of Indigenous People leaving the reserves for urban centres to attend schools or find employment, which exacerbates the challenge for an on-reserve business to find and keep skilled employees. Statistics show that over half of First Nations people with registered Indian status no longer live on reserves. Access to reliable internet: Taken for granted by most Canadians, reliable, high-speed internet is not a given in remote Indigenous communities. Lack of this very basic business amenity means there's no company website, no email, and no online marketing. Lack of infrastructure: Again, taken for granted by most Canadians, reliable roads, airports or even airstrips, electricity and water are not givens in some Indigenous communities.

Social barriers: Education and training: The lower-than-average education rates of Indigenous Peoples is a significant hindrance to starting and running a business and affects everything from accessing government programs, arranging financing, writing a business plan, negotiating with suppliers/contractors/clients, to completing day-to-day record keeping. Racial discrimination: Federal government policies put in place by Canada's founding fathers created many of the issues and challenges Indigenous Peoples still live with today and contribute to the negative attitudes towards Indigenous Peoples and their businesses. Enduring stereotypes and an underlying misconception that Indigenous culture is counterintuitive to good business strategies are inhibitors to Indigenous entrepreneurs.

Negative views of Aboriginal peoples (13%). Just over one in ten expresses his or her first impression of Aboriginal peoples in clearly negative terms pertaining to special treatment or negative attributes. This includes mention of tax breaks and other rights and privileges (5%), reliance on welfare or government handouts (3%), that Aboriginal peoples are lazy or don't work to contribute to society (2%), and generally negative feelings (3%). The proportion citing such impressions in urban Canada is essentially unchanged since 2009. Stereotyping and racism are significant challenges faced by Aboriginal entrepreneurs, as well as other members of the Aboriginal communities living in Canadian cities. A 2003 survey reported that 46% of off-reserve Aboriginal respondents felt that they had been a victim of racism or discrimination at least once over the previous two years. In addition, more than half of Canadian respondents to a 2002 Ipsos Reid survey reported that "racism separates Aboriginal peoples from the rest of society." These findings were confirmed by the Environics Institute, which reported in 2010 that almost all Aboriginal Canadians living in cities agreed that non-Aboriginal people behave in an unfair or negative way towards Aboriginal peoples. lienation from community: Some Indigenous communities view entrepreneurship as going against community-oriented values. In some situations, alienation occurs if a business, via procurement

contracts, benefits from resource development that the greater community opposes. Access to resources: Indigenous businesses based in remote communities are often limited in their access to resources and goods and services that support their business.

Lack of infrastructure: Again, taken for granted by most Canadians and Canadian entrepreneurs, reliable roads, airports or airstrips, electricity, and water are not givens in remote Indigenous communities. The lack of infrastructure can severely impact the potential of an Indigenous business. Language barriers: There are only two official languages in Canada but there are over 60 Indigenous languages grouped into 12 distinct language families. According to the 2011 Census, almost 213,500 people reported an Indigenous mother tongue and nearly 213,400 people reported speaking an Indigenous language most often or regularly at home. [4] Of those 213,400 Indigenous people who speak an Indigenous language at home, some are going to be entrepreneurs who will face language barriers as they navigate the waters of business development and operation, especially if their intended market is not their community and not Indigenous.

But, despite the challenges for Indigenous businesses: As the National Indigenous Economic Development Board has long maintained, a dynamic small business sector and strong entrepreneurship among Indigenous Canadians is critical in order to lessen the gap and improve living standards of Indigenous peoples. There have been longstanding barriers which continue to negatively influence the rates of entrepreneurship of Indigenous Canadians including finding and retaining talent, infrastructure deficits and access to capital. Despite these hurdles, the percentage of total Indigenous individuals embarking on entrepreneurial and business development has grown from 6.8% in 2006 to 7.4% in 2016. The goal of economic self-reliance is what motivates entrepreneurs and the above stats indicate that Indigenous entrepreneurs are increasingly creating their own destinies. As we move forward with "dismantling the Indian Act on a case-by-case basis" and with reconciliation, we should see some real movement for Indigenous entrepreneurs.

Model Specification

The functional relationship between advancing endogenous African companies and the sustainable business management indices is stated as

AEAC = F(GACA,PRYB, IPFM, PICC,SRCO, MRWE,IMCP)…..1

Where :

AEAC=Advancing Endogenous African Companies,

GACA=Gaining a competitive Advantage

PRYB=Protect your Brand

IPFM=Improve Profit with a growing Market

PICC=Make a positive impact on Climate Change

SRCO= Seamless Regulation Compliance

MRWE= Mitigating Risk With Ease

IMCP= Mitigate Risk with Ease

This function can be restated in a mathematical for as:

AEAC = B0 +B1.GACA+ B2. PRYB =B3. IPFM +B4. PICC +B5.SRCO +B6. MRWE + B7. IMKCP + Ut ….2

B0 =the intercept, B1…B7 = The coefficient of the independent variables of Sustainable business management

RESULTS AND DISCUSSIONS

AEAC = −0.015692 + 9.370384GACA-0.015692PRYB+9.370384IPFM-1.923992 PICC+0.102353SRCO-1.858167MRWE-0.012896IMKCP

Looking at the regression result of model 4, one can see that the p-value of the regression coefficients of such variables as DJSI and RATE are less than 0.01, so these variables are proved to be statistically significant for the model at the corresponding confidence level of 99%.

Model 4: AEAC is dependent variable				
C	−0.015692	18.03257	-0.213582	0.8313
GACA	18.3285	5.589056	3.279354	0.0014
PRYB	-1.848222	4.021383	-0.459599	0.6467
IPFM	-1.505745	5.890358	-0.255629	0.7987
PICC	-5.255763	5.302965	-0.991099	0.3239
SRCO	-0.012108	0.082484	-0.14679	0.8836
GACA	0.442189	0.049561	8.922208	0.0000
MKCP	1.408355	1.397568	1.007718	0.3158

The coefficients of GACA, MRWE and MKCP are positive, meaning they have a direct connection with the outcome variable. On the contrary, other variables are negatively related to ROE value.The interpretation is that for every 1-unit increase in either rating in GACA or sustainable growth rate, ROE will increase by either 18.32 or 0.44 times, respectively, holding constant all of the other predictors in the model.GACA ,GACA are statistically significant to AEAC

CONCLUSIONS

For your business to grow and be a success, you will need to get on top of sustainable business management. This paper has covered some key information you should be aware of before getting involved. The more informed you are, the better you will be to make informed decisions regarding the future of your business. You will now understand how you can implement changes through a sustainability course, and how it could gain you a competitive advantage in the market, growing your profits. It helps that it will protect your brand while also making a positive impact on climate change. Cutting-edge technology has emerged to help corporations achieve their corporate sustainability management goals. From seamless compliance of relevant regulations to managing risk to your corporation with ease, a focus on corporate sustainability management can bring substantial benefits to your company. With clear evidence of the advantage provided to CSM firms when it comes to investor interest and operating a more efficient business, corporations can risk falling behind without a strategy for delivering effective corporate sustainability management.

To ensure sustainable business practices, business leaders need to develop processes, structures to meet up with the requirements of green practices while still focusing on achieving the strategic goals of the business. Enterprises should evade routines that can trigger changes to the climate, hydro resources, forestry, and embrace alternative sources of energy like solar, energy saving bulbs etc.

Disclosing sustainable practices of companies helps maintain transparency about risks and opportunities faced as a business, alleviating negative ecological, social and governance impacts and improving the reputation of the brands. Conglomerates like Dangote Ltd., commercial banks, manufacturing companies disclose sustainability reports yearly; shareholders and the general public are aware of the true value, assets and practices of the organizations.

Nigerian organizations must endeavor to key into making the environment they are functioning better by proposing and enforcing the reuse and recycling of plastics especially and advance waste policies; create safe work initiatives, continuous learning, and alternative energy measures for sustainability. Using green methods and decreasing the impact of work and actions on the environment, society and economy could improve efficiency and make sure businesses remain a going concern.

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TAX REVENUE UTILIZATION AND SUSTAINABLE DEVELOPMENT OF MANUFACTURING FIRMS IN NIGERIA

Okezie, Stella O. and Eke, Onyekachi A.
Department of Accounting, College of Management Sciences Michael Okpara University of Agriculture, Umudike

ABSTRACT
Proper tax utilization and planned government spending are a panacea for ensuring sustainable growth and development in any nation, mainly developing countries. Improper utilization of tax revenue coupled with corruption has been the clog in the wheel towards achieving sustained development in Nigeria. Studies have associated sustainability with effective tax utilization and proper government spending, but the extent to which this affects the sustainability of endogenous manufacturing firms in Nigeria remains uncertain. This study, therefore, empirically examined the effect of tax utilization on the sustainability of manufacturing firms in Nigeria. The *ex-post facto* research approach was adopted using time series data from the Central Bank of Nigeria's statistical bulletin and World Bank data. The study covered from 1990 to 2022. Descriptive and inferential tools were employed. The data set was analyzed using the Vector Error Correction Model (VECM) after carrying out unit root tests for stationarity to avoid obtaining invalid and unauthentic regression estimates. The study found a long-run relationship between tax revenue utilization and manufacturing value-added used as a proxy for sustainable development. Tax revenue utilization has a positive and significant effect on MVA. Furthermore, the study revealed that a deviation from equilibrium in the short run is corrected at a speed of 15%, which is significant at a p-value of (0.0056). The study concluded that tax utilization has a long-run relationship and positive effect on the sustainable growth of manufacturing firms in Nigeria. Based on the results, the study recommended that the government ensure optimal utilization of tax revenue towards enhancing the development of the productive sector in Nigeria and block avenues through which government funds are siphoned, thus restricting the desired objective of achieving sustainable development in Nigeria.
Keywords: Tax revenue Utilization, Manufacturing Value added, Sustainability, Corruption, Government spending**.**

INTRODUCTION

Taxation has been a topic of ongoing scientific interest as a way for any country to support and accomplish its development goals. Several academics have seen taxes as a legitimate means of attaining sustainable development. Ajeigbe *et al.* (2023) noted that prior to this point, the sole goal of taxation as a subset of fiscal and monetary policy was economic growth and development. However, in recent years, growth and development and sustainable development have been associated with monetary, tax, and other fiscal policies. Tax revenue has been and will continue to be a fundamental matrix for the development of any state. A state's establishment and continued existence are determined by how well its tax system functions. Tax revenue is the sum of taxes collected from income, profits, contributions, levies on goods and services, payroll taxes, transfer of property, and other taxes (OECD, 2015). However, financing developmental activities has been a mirage due to corrupt practices, high levels of non-compliance, avoidance, and outright evasion of these taxes.

The sole responsibility of ensuring a better standard of living and providing social and infrastructural amenities like good road networks, power, an affordable health sector, a good education sector, and security of lives and property has been that of the nation's government. Funds are required for these basic facilities to be provided and effectively carry out its primary and other subsidiary functions, and one of the government's revenue sources is taxation.

Unfortunately, Government responsibilities continue to increase over time, especially in developing countries, due to the growing population of citizens and technological development. Nigeria's government has depended so much on oil revenue to execute its primary functions and economic development programs. At the same time, most developed nations depend mainly on taxation to generate the required income to meet their financial needs.

Taxes offer a steady and predictable stream of income to support development goals. However, the economy's viability is a prerequisite for the sustainability of tax income in assuring long-term growth and thus impacts the government's capacity to fulfill its duties. (Ashibogwu *et al.*, 2022).In order to accomplish its aims and objectives and maintain a competitive edge in the Council of Nations, the government of any country must engage in methodical and strategic planning to ensure sustained progress. Adegbie *et al.* (2022) describe the process of sustainable growth as involving the effective development of enabling economic forces and the sincerity of government initiatives that will stimulate economic activity, national

real production, and aggregate demand that will simultaneously generate fixed capital formation and inclusive economic growth over some time. However, Rani and Kumar (2019) anticipate that the government will invest in sufficient capital formation and economic infrastructure to boost national output and human potential.

In order to meet the needs of businesses, individuals, and Nigerian's aspirations for sustainable growth, the concept of sustainable development, or sustainability, has been developed to ensure that macroeconomic indicators and economic policies are operating harmoniously and optimizing both current and future economic potential. Sustainable development, which aims to create sustainable improvements in the quality of life for all and sundry, is the principal goal of development policy.

Business enterprises, including manufacturing firms, are the primary drivers of economic growth and job creation, and their contributions to public finances are vital in achieving sustainable development. Okoye *et al.* (2022) submit that Countries should practice efficient policies and initiatives to create and prepare the ground for sustainable development by fostering the growth of endogenous businesses, primarily SMEs. Business enterprises play a significant role in the development of most economies around the world, particularly those in emerging and developing countries. These businesses create direct wealth and reduce poverty. The business has helped contribute to Nigeria's Gross National Product (GNP), which is the total monetary value of all goods and services produced within a particular year by increasing the output of goods and services. Also, these enterprises contribute to providing technical innovation and competition for better services and meeting the needs of other businesses by providing products or raw materials needed for other businesses to survive. Their existence in any nation should not be underestimated if such an economy desires development.

A significant number of issues have plagued the endogenous business landscape in Nigeria. Poor infrastructure, lack of entrepreneurial skills, lack of finance, low government support, low demand for goods and services, inadequate technology, multiple taxation, policy somersault, and much more. These issues have, over the years, slowed down development. The government has also not implemented much intervention due to misguided policy formulation and implementation. A country's fiscal policy framework must include taxes as a fundamental element to achieve its primary economic stabilization and growth goals. The effect of taxes on output is considered from the perspective of production, public spending, people's ability to work, save, and invest, and the transfer of resources from unproductive to profitable sectors by the government and private investors seeking to maximize returns on their investment. What matters for these decisions is the total amount of taxes and how different tax instruments are developed and utilized to generate income and encourage development.

The impacts of taxation schemes on economic performance, notably using GDP, have been the subject of various empirical examinations. However, this study seeks to provide empirical evidence on the effect of tax utilization on the sustainability of endogenous manufacturing firms in Nigeria by evaluating the effect of tax revenue utilization on the sustainable development of manufacturing firms and assessing the effect of government expenditure on the sustainable development of manufacturing firms in Nigeria. The study, therefore, hypothesized that:

Ho: Tax revenue utilization does not significantly affect the sustainable development of manufacturing firms in Nigeria.

LITERATURE REVIEW

Concept of Tax and Taxation

In emerging nations, taxes are a very effective strategic instrument. It makes paying for critical public services, including infrastructure, education, health, and justice, feasible. However, beyond that, taxes impact people's decisions about their finances, employment, and education, as well as corporate innovation, output, job creation, and investment (OECD, 2009). The responsibility shouldered by the government of any nation, particularly the developing nations, is enormous. The need to fulfill these responsibilities largely depends on the amount of revenue generated by the government through various means. The design and blending of the various fiscal instruments used to produce government income impacts all of these choices and the tax burden. Taxation is one of the oldest means by which the cost of providing essential services for the generality of persons living in a given geographical area is funded.

Okeke *et al.* (2018)noted that over the years, tax revenue in Nigeria has made up a relatively small portion of total government revenue. This is because the bulk of revenue needed for development is derived from oil. Nigeria's income is derived mainly from oil because of its heavy reliance. Nigeria's economic growth is hampered by its dangerous over-reliance on oil as a primary source of income (Oladipupo & Oladipupo, 2015). Due to the sharp decline in the price of oil over the past few years, Nigeria's government earnings have been negatively impacted, and there are currently insufficient funds to support the country's three levels of government. This was made evident in April 2020, when the price of a barrel of crude oil dropped

as low as $38, and it was made worse by the COVID-19 pandemic (Gbeke & Nkak, 2021). Despite this, crude oil export has continued to account for over 80% of federal government revenue.

In comparison, the remaining 20% is contributed by the non-oil sector, of which taxation is a part. Mominur (2022) concludes that taxation aims to produce enough revenue to keep the government running while causing the least harm to the economy. However, more realistically, the government needs to use tax policy as a steering wheel to impose economic control. Unfortunately, the Nigerian economy has consistently failed to experience the anticipated economic development derivable from tax revenue, and these facts weaken the foundation of the Nigerian economic transformation and pace of progress (Oki *et al.,* 2020)

Tax Revenue Utilization and Sustainable Development Manufacturing Firms in Nigeria

The importance of tax cannot be overstated. In addition to producing income, it aids the government in attaining the nation's macroeconomic financial and fiscal goals (Onakoya & Afintinni, 2016). Every economy depends heavily on tax revenue, a powerful tool for transforming economies. It is dynamic and incorporates contemporary economic developments. In addition to other sources of money that are required for the government to meet its urgent commitments, the tax system provides a possibility for extra revenue collection. One of the most efficient ways to mobilize a country's internal resources is through its tax system. It also helps to create an atmosphere that supports economic growth and development. Much literature exists on Nigeria's tax revenue and economic growth (Adereti *et al.*, 2011; Bukie *et al.*, 2013). In these studies, researchers used economic development and economic growth interchangeably. Some researchers estimated the effect of tax revenue on Nigeria's economic development using Gross Domestic Product (GDP), which is an indicator of economic growth. Taxation plays a crucial role in promoting economic activities. Through taxation, the government ensures that resources are channeled towards important projects in society while giving relief to the weak. Adeyemi (2012) claimed that to achieve sustainable development in a nation's social and economic spheres, the government must weigh the trade-offs associated with offering tax breaks to attract foreign direct investment (FDI), as doing so would promote the nation's sustainable development.

Ugoani (2018) opined that sustainable growth from the perspective of implementation of tax revenue has been devastating, orchestrated with a lack of optimal utilization of substantial tax revenues that have accrued to African nations. Sub-Sahara Africa accounts for only a meager 2% of global economic activities, although the region occupies 14% of the global population. Most worrying is the fact that as the population of the region is projected to reach about 2 billion by the year, the same projected strong possibility of the African poverty level growing at an accelerated level. The World Bank projected that Africa could have 90% of the world's extreme poverty by 2030, citing the recent COVID-19 pandemic devastatingly impacting the sustainable growth in Nigeria and the rest of African countries. According to the World Bank report, over 39 million Africans will be living in extreme poverty by the second quarter of 2021.

Theoretical Review

Theories of taxation may be based on connections between taxes paid and state benefits received or between public spending and social and economic growth. This study is underscored by the benefit theory of Erik Robert in 1919. The theory assumes that citizens will pay more taxes if they have sufficient benefits from the activities of the state. Hence, taxes are collected to achieve economic objectives, enhancing economic growth and development. In order to focus on the link between tax utilization, public spending, and economic development, Rostowand Musgrave focused their justifications for rising public spending on the requirement to provide social amenities for economic and social development. They argue that to hasten the nation's growth and development, capital projects like the construction of hospitals, schools, a decent road system, and electricity infrastructure are required when an economy is still in its early stages. Therefore, government spending significantly influences a country's ability to develop and is a function of that program. Consequently, government spending is a component of a nation's development strategy and significantly influences manufacturing production level in particular and a country's overall economic activity. The theory is deemed appropriate for this investigation since it incorporates certain aspects of both endogenous and exogenous growth theories.

Empirical Review

Taxation is essential for growth and development in any nation. This section summarizes empirical studies in both developed and developing countries. The summary of these studies is done in a tabular presentation to enable a snapshot of the author(s), year of investigation, topic or primary objective, methodology employed, and significant finding(s)

S/N	Author(s)/Year	Country	Topic	Methodology	Major Findings
1.	Ashibogwu, A.-E., & Toneradu, (2022)	Nigeria	Tax Revenue Utilization and Economic Development in Nigeria	ARDL bounds testing approach to co-integration and ECM	Economic growth had a long-run significant relationship with tax revenue components
2.	Adewale, Amos, & Oladimeji (2022)	Nigeria	Tax Revenue and Sustainable Development in Nigeria: A Disaggregated Analysis	ARDL bound testing approach to co-integration and the speed of adjustment (Short run)	Petroleum Profit Tax, Company Tax, Value Added Tax, and Personal Income Tax have a positive short-run relationship with economic growth (GDP), while Customs and Excise Duties and Personal Income Tax exhibit a negative relationship in the short and long run
3.	Daniel-Adebayo, A., Adegbie & Ajayi-Owoey (2022)	Sub-Saharan Africa countries	Tax Revenue And Infrastructure Expectation Gap In Selected Sub-Saharan African Countries	Panel Regression	The study concluded that tax revenue influenced the infrastructural expectation gap in Sub-Saharan African countries
4	Omodero & Alege (2021)	Nigeria	the impact of crude oil resources and tax revenue on the social development of Nigeria from 2003 to 2019	Multiple regression techniques of estimation	The result indicated that crude oil revenue is insignificant in affecting social development in Nigeria. Also, exchange and inflation rates significantly negatively impact the country's social development. However, tax revenue positively and statistically impacts social development.
5.	Etim, Mbobo, Ihenyen, & David (2020)	Nigeria	Taxation and Manufacturing Sector Output in Nigeria	Multiple regression analysis	There is a statistically significant relationship between taxation and manufacturing output in Nigeria.
6.	Uket, W. & Etim (2020).	Nigeria	Impact of Tax Revenue on Economic Development in Nigeria	Ordinary least square (OLS) regression technique	The study revealed a positive relationship with a coefficient of determination of 99.2% of the variation in economic

					development attributable to the tax income streams studied.
7.	Okeke, Mbonu & Amalahu (2018)	Nigeria	Effect Of Tax Revenue On Economic Development In Nigeria	Multiple Linear Regression	The findings of this study showed that tax revenue has a statistically significant relationship with primary school enrolment, life expectancy, and per capita income in Nigeria, respectively
8.	Dladla and Khobai (2018)	South Africa	Effect of taxation on economic development in South Africa	Autoregressive Distribution Lag (ARDL)	The study's findings showed that trade openness and economic growth have a long- and short-term positive association, while taxes have a significant and negative long- and short-term impact on growth.
9.	Abomaye-Nimenibo, W., Michael & Friday (2018)	Nigeria	An empirical analysis of tax revenue and economic growth in Nigeria from 1980 to 2015	Multiple Regression Analysis using Ordinary Least Square (OLS) method	The study revealed that there was a long-run relationship among the variables. The short-run regression result showed that Petroleum Profit Tax and Company Income Tax have no significant relationship with economic growth in Nigeria. Customs and Excise Duties were found to have a significant relationship with economic growth in Nigeria during the period under study.
10.	Yadirichukwu and Ebiringa (2017)	Nigeria	Impact of different types of tax on the economic growth of Nigeria.	The OLS regression econometric and the Granger causality technique were adopted.	The outcome indicated that the custom and exercise tax was a determinant factor of economic growth in the nation and is capable of impacting development but has a significant inverse relationship with the

					GDP
11.	Ofoegbu, Akwu & Oliver (2016)	Nigeria	Empirical analysis of the effect of tax revenue on economic Development of Nigeria	Ordinary least square (OLS) regression technique	Findings show a positive and significant relationship between tax revenue and economic development.

Source: Authors Compilation, 2023

METHODOLOGY

The *ex-post facto* research design was adopted for this study. The justification for the use is that the researcher cannot manipulate the required data. Time series data for 1990 – 2022 were sourced from the Federal Inland Revenue Service (FIRS) and the World Bank Report. Unit root tests were carried out on the data using the Augmented Dickey-Fuller (ADF) test to ensure that the series is only integrated of order 0 and 1 as the presence of the order 2 variable could result in a model breakdown. Also, the test is to avoid estimating spurious regression. All variables were co-integrated, implying that they were of order one (1). The data was analyzed using the Ordinary Least Squares (OLS) regression technique of the Vector Error Correction Model (VECM). The model specified permits the estimation of the effect of tax revenue utilization on the sustainable development of endogenous manufacturing firms in Nigeria as follows:

$MVA = f(\text{TR})$...(1)

The long stochastic form, equation (1) becomes:

MVA $= \beta_0 + \beta_1 + \mu$ .... (2)

Where: MVA = Market Valued added for Manufacturing sector,
TR= Tax revenue utilization

RESULTS AND DISCUSSIONS

Table 1: Descriptive Statistics for all variables

	LOGMVA	LOGTR
Mean	1.080086	4.512954
Median	1.072250	4.508845
Maximum	1.320769	4.919078
Minimum	0.816241	4.223454
Std. Dev.	0.152115	0.147348
Skewness	0.078646	0.440529
Kurtosis	1.676891	3.457974
Jarque-Bera	2.441116	1.355757
Probability	0.295065	0.507693
Sum	35.64283	148.9275
Sum Sq. Dev.	0.740445	0.694762
Observations	33	33

Source: Authors Computation, 2023

Table 1 details the nature and attributes of the variables employed in the study. Table 1 revealed the variable's mean, median, minimum, and maximum values. It also showed the standard deviation, skewness, kurtosis, JB statistics, its probability, and the sum of square deviation. The Jarque-Bera statistics reveal that all variables in the study are typically distributed judging from the value of their respective p-values of (0.295065, 0.507693) for LOGMVA and LOGTR, which are all greater than 0.05 level of significance. This indicates that the variables are unlikely to experience outliers that can distort inferences deduced from the results.

Unit Root Test

Table 2: Summary of Unit Root Test

Variable	ADF Statistic @ 1st difference	Critical Statistic @ 5%	Prob.	Order	Remark
LOGMVA	4.093835	2.960411	0.0034	1(1)	Stationary
LOGTR	4.133116	2.960411	0.0031	1(1)	Stationary

Source: Authors Computation, 2023

Table two (2) gives the result of the Augmented Dickey fuller (ADF) unit root test measuring the stationarity of the variables employed in the study. The result reveals that all variables were integrated in the order of 1. This implies that all the variables were integrated (stationary) at first difference. The implication is that the variables are co-integrated, thus confirming the existence of a long-run relationship between the variables. The Johansen Co-integration test was conducted.

Johansen Co-integration Test

In ascertaining the long-run relationship subsisting among the variables, the Johansen co-integration test was carried out, testing the null and the alternate hypothesis;

H0: There is no long-run relationship among the variables in the model

H1: There is a long-run relationship among the variables in the model

Table 3: Co-integration Results

Date: 10/24/23 Time: 09:43

Sample (adjusted): 1993 2022

Included observations: 30 after adjustments

Trend assumption: Linear deterministic trend

Series: LOGMVA LOGTR

Lags interval (in first differences): 1 to 2

Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.502658	22.50105	15.49471	0.0037
At most 1	0.050251	1.546711	3.841466	0.2136

Trace test indicates 1 co-integrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.502658	20.95434	14.26460	0.0038
At most 1	0.050251	1.546711	3.841466	0.2136

Max-eigenvalue test indicates 1 co-integrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Co-integrating Coefficients (normalized by b'*S11*b=I):

LOGMVA	LOGTR
8.364970	12.13419
4.199617	-5.529512

Unrestricted Adjustment Coefficients (alpha):

D(LOGMVA)	-0.027201	0.000871
D(LOGTR)	-0.026936	0.014971

1 Cointegrating Equation(s):	Log-likelihood	106.1262

Normalized co-integrating coefficients (standard error in parentheses)

LOGMVA	LOGTR
1.000000	1.450596
	(0.25210)

Adjustment coefficients (standard error in parentheses)

D(LOGMVA)	-0.227534
	(0.04667)
D(LOGTR)	-0.225315
	(0.12287)

Source: Authors Computation, 2023

From Table 3, we observe that the study's variables are co-integrated, implying a long-run relationship between the variables. A close look at the trace statistic infers that there is at most 1 co-integrating equation and a value of 22.50105 higher than the 0.05critical value of 15.49471 and also significant at a 5% significance level, indicating that there is a long-run relationship among the variables. This is confirmed by the Max Eigen statistics, which also indicated that there is at most 1 co-integrating equation with a value of 20.95434 as against 0.05 critical value of 14.26460 with a probability of 0.0038. Thus, having established the long-run relationship among the variables, we will now estimate the Vector Error Correction Model to affirm the long-run relationship and observe the short-run dynamism of the variables.

Vector Error Correction Model

Table 4: Vector Error Correction Model Estimate

Vector Error Correction Estimates
Date: 10/24/23 Time: 09:45
Sample (adjusted): 1992 2022
Included observations: 31 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Co-integrating Eq:	CointEq1	
LOGMVA(-1)	1.000000	
LOGTR(-1)	1.033565	
	(0.40343)	
	[2.56194]	
C	-5.733436	
Error Correction:	**D(LOGMVA)**	**D(LOGTR)**
CointEq1	-0.147644	-0.099977
	(0.05121)	(0.11041)
	[-2.88283]	[-0.90554]
D(LOGMVA(-1))	0.264550	0.148467
	(0.19236)	(0.41469)
	[1.37525]	[0.35802]
D(LOGTR(-1))	0.153442	0.306476
	(0.11889)	(0.25629)
	[1.29066]	[1.19583]
C	-0.007208	0.014699

	(0.00723)	(0.01559)
	[-0.99686]	[0.94300]
R-squared	0.396058	0.090752
Adj. R-squared	0.217842	-0.010276
Sum sq. resids	0.038339	0.178169
SE equation	0.037682	0.081233
F-statistic	3.785140	0.898290
Log-likelihood	59.78968	35.97753
Akaike AIC	-3.599334	-2.063067
Schwarz SC	-3.414304	-1.878036
Mean dependent	-0.005051	0.020051
SD dependent	0.042608	0.080819
Determinant resid covariance (dof adj.)		7.30E-06
Determinant resid covariance		5.54E-06
Log-likelihood		99.63729
Akaike information criterion		-5.783051
Schwarz criterion		-5.320474
Number of coefficients		10

Source: Authors computation,2023

Vector Error Correction Model is a restricted co-integrated VAR model. The idea of the Vector Error Correction Model (VECM) consists of a VAR model of the order p-1 on the differences of the variables and an error-correction term derived from the known (estimated) co-integrating relationship. The coefficients in the co-integrating equation showed the estimated long-run relationship among the variables. The coefficient in the VECM also revealed how deviations from that long-run relationship affect the changes in the variable in the following period. In summary, those coefficients across cointEq1 under the VECM show how each variable will move in the following period and return to the long-term relationship. The first figure under each variable was the coefficient. The second value in circle brackets represented the standard error, while the third value in square brackets represented the t-statistics. The cointeq1 value of 1.033565 indicated a long-run relationship between the independent and dependent variables MVA, representing a high percentage of about 100%. Next was to determine how quickly the long-run relationship can converge in the following time frame. The coefficient value of the log of Tax revenue (TR) was −0.147644 to prove that it has a short-run period in having a long-run impact on the dependent variable log of manufacturing value added (MVA) both now and in the next period. The short-run speed of adjustment was approximately 15%. This showed that it is a vital variable affecting manufacturing firms' sustainable development. As shown in Table 4, these results indicate both the Co-integrating equation and the error correction term indicating the speed of adjustment from long-run deviations. The table shows that tax revenue utilization is positively related to the sustainable development of manufacturing firms measured by manufacturing value added and is significant in the long run. Furthermore, the adjustment coefficient, which is the short-run estimates, showed that the correction from the previous year's deviation from long–run equilibrium stood at 15% (0.147644) and was significant at a p-value of 0.0056. In the short run, therefore, all deviations from the long run are corrected at a speed of adjustment of 15%. The result also indicates that a percentage change in tax utilization is associated with a 0.15344 increase in manufacturing value added on average ceteris paribus in the short run. The R^2 indicating the coefficient of determination stood at an approximate value of 40%. This implies that the proportion of variance in the added manufacturing value can be explained by tax revenue utilization to that tune, which could be considered near average. The Durbin-Watson Statistic reported a value of 2.28, indicating that the model does not suffer from serial correlation.

Hypothesis Testing

We had previously hypothesized that Tax revenue utilization has no significant effect on the sustainable development of manufacturing firms in Nigeria. To test the hypothesis, the Vector Error Correction model was used to assess the overall dependence of the dependent variable on the independent variable. The outcome of the vector error correction analysis was used to test the hypothesis of this study. This study accepts a hypothesis at a 5% significance level. A null hypothesis will only be rejected in favor of the alternate if the P-value (probability value) is less than 0.05. Based on the VECM result showing that tax revenue utilization had a positive and significant long-run effect on the sustainable development of manufacturing firms in Nigeria, we conclude that the null hypothesis stated cannot be sustained and state

that tax revenue utilization has a significant effect on sustainable development of manufacturing firms in Nigeria.

CONCLUSION AND POLICY IMPLICATIONS

The main objective of this research was to assess the impact of tax utilization on the sustainable development of manufacturing firms in Nigeria. This research was a quantitative study that employed an ex-post facto research design and regression analysis. Findings revealed that tax utilization has a positive and significant association with the sustainable development of manufacturing firms in the long run. The results indicated that tax utilization positively and significantly impacted sustainable development. The result's significance underscores the importance of proper utilization of tax proceeds to benefit the populace and the economy at large. This significance also underscores the great need for efficiency in revenue collection, administration, advocacy, and the ability to bring all that is taxable within the tax net. The power of the independent variable on the dependent variable tax utilization on sustainable development of manufacturing firms was almost average.

Given that all things are equal, a better position could be attained if efficiency is the watchword in the administration, collection, and, most importantly, the utilization of tax revenue towards achieving growth and development. The findings of this research provide evidence that tax revenue utilization promotes the sustainable development of manufacturing firms in Nigeria. According to statistics, the ratio of tax revenue to GDP is still very low compared to other economies as Nigeria depends mainly on crude oil export; however, taxation remains a strong socio-political and economic tool for sustainable development. The government should block leakages in the tax system and be transparent and accountable in the use of tax funds in order to achieve the desired level of sustainability.

It is recommended that the Nigerian government improve its tax system by intensifying efforts to ensure that every individual or corporate entity that should be taxed is captured within the tax net, thus expanding the tax base and attracting more tax revenue. The study also recommends that the government should ensure optimal utilization of tax revenue towards enhancing the development of the productive sector in Nigeria and block avenues through which government funds are siphoned, which restricts the desired objective of achieving sustainable development in Nigeria. Secondly, there should be greater transparency by the government on the management and utilization of tax resources so as to give taxpayers greater assurance of its application and increase compliance.

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EFFECT OF TAXATION ON THE PERFORMANCE OF SMALL AND MEDIUM-SCALE INDIGENOUS ENTERPRISES IN ABIA STATE, NIGERIA

[1]Ogbe, S. E., [2]Ewurum, N. G., and [3]Okoro, O. K.
[1]Department of Entrepreneurial Studies, [2]Department of Economics, [3]Department of Banking and Finance, Michael Okpara University of Agriculture Umudike
Corresponding author: talk2samogbe@yahoo.com

ABSTRACT
The study was on the effect of taxation on the performance of small and medium-scale indigenous enterprises in Abia State. The study specifically determined the socio-economic characteristics of respondents, the level of the performance of indigenous business operators, the level of taxes paid, the perception of indigenous business operators on tax policy, the effect of tax paid on the performance of the respondents, and the factors influencing the amount of tax paid by the indigenous business operators the study area. This study adopted the primary source of data with the use of face-to-face interviews and questionnaires. A simple random sampling technique selected one hundred and fifty-seven (157) respondents. Data were analyzed using statistical tools such as mean, percentage, frequency distribution, regression, and ANOVA. The study showed that most of the respondents who operated indigenous businesses were male, single, young, educated, and having good business experience enough to support the stability of their businesses. Most (73%) of the respondents selected for the study were involved in non-food businesses. In addition, most indigenous business operators had an average income of ₦ 15,260.00 and paid a minimum of ₦ 8 8420 per month as tax. The level of tax payment per month is on the high side and too much to shoulder by the indigenous business operators. Furthermore, indigenous businesses' perception of tax policy in the state did not conform with best practices evidence in the tax burden of operators. However, the operators of indigenous businesses have shown resilience in their operations. Age, firm age, income generated, value of assets, type of enterprise, and business registration were significant variables influencing the amount of tax the indigenous business operators paid. The study recommended that the government should engage operators of SMEs in the state to work out modalities to reduce their tax burden that will ultimately promote business activities in the state. Also, unwholesome tax practices in the state should be eliminated to make the state the next business destination.
Keywords: Taxation, performance, small, medium scale, enterprises

INTRODUCTION
Taxes are compulsory levies to the government on personal income (salaries), business profits, interest, dividends, and commissions. In this study, taxes are daily and monthly levies/ charges paid to the government by SME operators. Tax may also be an incentive or a disincentive to investment and savings, irrespective of whether the tax is direct or indirect. Small and Medium Enterprises Comprise about 95% of the entire economy and serve as sources of employment generation, innovation, competition, and economic dynamism, ultimately leading to poverty alleviation and national growth. At any rate, tax policy is one of the factors that determines the volume of the operations of these small and medium enterprises in any economic environment. Therefore, every country, including Nigeria, wants to build a civilized country with a strong and sound economy.

Revenue realized from taxation is a significant source of revenue for the Government of Nigeria and, as such, is an essential tool used in the development of Nigeria and her economy. A country's tax policies and systems are significantly related to business ventures in that country. An economy that enacts favorable and progressive tax laws and policies will breed successful and finance-healthy business organizations. Once businesses flourish, the economy flourishes as well, as there is no quicker way of stirring the affairs of an economy without the help of organizations that move services, goods, money, and investments from those with surplus to those with deficit; those with marketable ideas/output to those who need these ideas and products. In essence, businesses and tax policies greatly depend on one another for survival. If one is significantly affected, the other follows suit.

Globally, Small and Medium Enterprises (SMEs) are recognized as the main engine for growth and development. In Nigeria, readily available data on SMEs is scarce, but statistics from the Registrar General's Department suggest that 92 percent of companies registered are micro, small, and medium enterprises. SMEs in Nigeria provide about 85 percent of manufacturing employment, contribute about 70 percent to Nigeria's GDP, and therefore have a catalytic impact on economic growth, income, and employment (Awunyo-Vitor *et al.,* 2012; Steel & Webster, 1991). Panitchpakdi (2006) sees SMEs as a source of employment, competition, economic dynamism, and innovation, stimulating the entrepreneurial spirit and the diffusion of skills. In looking at comparators in some emerging economies, studies indicate

that SMEs in India, amounting to almost 30 million operators, have been the fountainhead of several innovations in manufacturing and the service sectors and serve as the primary link in the supply chain between corporate entities and public sector units or enterprises. Here in Nigeria, most SMEs are involved in producing, processing, selling, and distributing made-in-Nigeria (indigenous) goods and services, thereby promoting a robust local economy.

However, regulations and red tape are reported as constraints to expanding businesses in Nigeria (Abia State inclusive). International research in this field shows that tax regulatory compliance costs are a significant portion of the total regulatory cost. Several other patterns emerged from the various local and international studies performed, among the most crucial being that tax compliance costs comprise a much more significant proportion of total compliance costs for smaller firms.

Small and medium enterprises' mortality rate, comprising 95% of the economy, is very high. According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), 80% of small businesses die within seven years of their establishment. SMEs in the nation and in the state continue to face a challenging business environment, which constituted the factors responsible for the untimely close-up of business enterprises ranging from taxation to enormous tax burden, scant electricity, and illegal levies.

Multiple tax burdens are another major problem in Abia State as many business organizations are taxed multiple times, and in some instances, the three tiers of government levy tax for the same event or asset. To this effect, some businesses are already collapsing, while the majority are still struggling to meet up with high tax rates to ensure their businesses still exist. According to a study conducted by Bateman (2013), it was reported in a survey that 90% of business owners admitted that taxes were a considerable constraint to their businesses, as they claim taxes are high and do not allow new businesses to cover up initial costs.

However, if a conducive environment is created for these small businesses to grow through proper regulation, the SME sector has the highest propensity to transform the state's economy. This study's main objective was to assess taxation's effect on the performance of small and medium-scale enterprises in Abia State, Nigeria. More so, the study examines the level of performance of small and medium-scale operators in Abia State, the level of taxes paid by respondents, the perception of respondents on tax policy in Abia State, the effect of tax paid on the performance of the respondent operations and the factors influencing the amount of tax paid by the respondents. Furthermore, we hypothesized that there is no significant difference between the socio-economic characteristics and the amount paid as taxes.

METHODOLOGY

The area of study is Abia State**.** Abia is a State in the southeastern part of Nigeria. The capital is Umuahia, and the major commercial city is Aba, formerly a British colonial government outpost in the region; and is also one of the most populated areas in Nigeria. Abia State was created in 1991 from part of Imo State. Abia State occupies about 6,320 square kilometers and is bounded north and northeast by the states of Anambra, Enugu, and Ebonyi. To the west of Abia is Imo State; to the east and southeast are Cross River State and Akwa Ibom State, respectively; to the south is Rivers State. Its population is about 3,727,300 million(NPC, 2006).

The study's target population comprises 285 SME operators in Abia State (Ministry of Commerce and Industry). The following criteria were adopted for an SME to qualify as part of the study population. Enterprises had at least two (2) paid workers and operated the business for at least five (5) years. The entrepreneurs/operators earned their income mainly from the businesses and registered with the Ministry of Commerce and Industry. TaroYamane's formulae were used in randomly selecting one hundred and fifty-seven (157) SMEs from the list the Ministry of Commerce and Industry provided on all the SMEs meeting the above criteria. The formulae are stated thus;

$$N = \frac{n}{1+n\,(e)2}$$

Where;

N= sample size

e = error term

n= target population

Data were analyzed using descriptive statistics such as means, percentages and frequency distributions, regression, and ANOVA. The implicit form of regression models is stated as follows;

$Y = f\,(X_1)$

Where:

Y = Performance (Amount realized in naira from business activities after all expenses)

X_1 = Amount paid as tax (Naira)and;

$Zi = f(X_1X_2X_3X_4X_5X_6X_7)$

Where;
Zi= Amount paid as taxes in Naira
X_1 = Age of the respondents in years
X_2 = years of business experience
X_3 = Age of the firm (years)
X_4 = Income generated in Naira
X_5 = Value of assets in Naira
X_6 = Type of enterprise (food based = 0, non-food based = 1)
X_7 = Business Registration (Yes = 1, No = 0)

The hypotheses were analyzed using Analysis of Variance. The formula is stated as follows;

$$F^* = \frac{\sum \tilde{Y}^2 / (K-1)}{\sum e^2 / (N-K)}$$

Where;
$\sum \tilde{Y}^2$= the Sum of squared deviations explained by all the regressors together
$\sum y^2$=the total sum of squared deviations of the y's
$\sum e^2$=the sum of residual deviations
The degree of freedom for $\sum \tilde{Y}^2$ is K-1, and the degree of freedom for $\sum e^2$ is N-K.
Where N is the sample size

RESULTS AND DISCUSSIONS

Socio-economic characteristics of the indigenous business operators

The socio-economic characteristics of the indigenous business operators in the study area are presented in Table 1

Table 1: Socio-economic characteristics of the indigenous business operators

Sex	Frequency	Percent	Mean
Male	90	57.3	
Female	67	42.7	
Total	**157**		
Age			
21-30	78	49.7	
31-40	47	29.9	
41-50	22	14.0	
51-60	10	6.4	**34**
Total	**157**	**100**	
Marital status			
Single	74	47.1	
Married	83	52.9	
Total	**157**	**100**	
Education			
Primary	14	8.9	
Secondary	60	38.3	
Tertiary	83	52.8	
Total	**157**	**100**	
Experience			
1-5	114	72.6	
6-10	25	15.9	
11-15	13	8.3	
16-20	5	3.2	
Total	**157**	**100**	**5**

Source: Field survey, 2021

Table 1 shows that 57.3% of the respondents were male, while 42.7% were female. This means that the majority of the respondents were male. The relatively high number of males in the study could be related to the fact that males are breadwinners of their families and, at the same time, required by the law to pay their taxes to the government purse irrespective of their status in the society.
The Table shows that about 50% of the respondents are aged 21-30. The mean age of the respondents was 34 years. This means that the majority of the respondents who usually pay their taxes were young, energetic, and enterprising. The enterprising nature of the respondents is associated with their ability to adopt technologies that ease the payment of taxes and, at the same time, grow their businesses.

Table 1 shows that 53% of the respondents were single, while 47% of the respondents were married. This means that the respondents who paid taxes were single. The occurrence of single people in SMEs could reflect their ability to hustle and always put in their best through their availability and direct involvement in their business activities. This situation leads to better business performance and prompt tax payments.
Table 1 shows that all the respondents involved in SMEs had one form of education or another. This means that all the respondents were educated. The result implies that respondents can read and easily comprehend the pros and cons of government tax policies.
Table 1 shows that 73% of the respondents had 1-5 years of experience. The mean years of experience in SMEs was 5. This means that most of the respondents have good business experience to support the stability of their businesses and, at the same time, aided them in growing the habit of regularly paying their taxes.

Type of indigenous enterprise operated by the Respondents

The distribution of the respondents based on the type of indigenous enterprises operated is presented in Table 2

Table 2: Distribution of the respondents based on type of indigenous enterprise operated

Types of indigenous enterprises	Percent	Frequency
Food based	**42**	**26.75**
Non-food based	**115**	**73.25**
Total	**157**	**100**

Source: Field Survey, 2021

Table 2 shows that 27% of the respondents operate food-based indigenous enterprises, while 73% of the respondents % operate non-food-based indigenous enterprises. This means most respondents selected for the study were involved in non-food-based indigenous businesses. The high number of respondents involved in non-food-based indigenous enterprises could be associated with the longevity of their products and firm assurance of having returns on their investment over time.

Level of performance of indigenous business operators

Level of performance of indigenous business operators in the study area is presented in Table 3.

Table 3: Level of performance of indigenous business operators

Performance (₦)	Frequency	Percentage (%)
1000-1000000	64	40.8
1001000-2000000	47	29.9
2001000-3000000	15	9.6
3001000-4000000	26	16.6
4001000-5000000	5	3.2
Total	**157**	**100**
Mean	**₦183,083**	

Source: Field survey, 2021

Table 3 shows that 71% of indigenous business operators' performance levels ranged from ₦1000-₦2,000,000, with the mean performance level being ₦183,083. This implies that the majority of the respondents generate a moderate income, which could affect tax compliance minimally.

Level of Tax paid by Indigenous business operators

The level of Tax paid by the respondents in the study area is presented in Table 4

Table 4: Level of tax paid by Indigenous business operators

Tax (₦)	Frequency	Percentage (%)
1000-200,000	141	89.8
201,000-400,000	16	10.2
Total	157	100.0
$\overline{X}$	₦105, 892	

Source: Field Survey, 2021

Table 4 shows that about 90% of the indigenous business operators paid taxes between ₦1000 and ₦200,000, while 10% paid taxes between ₦ 201,000 -and ₦400,000. The means tax the indigenous business operators paid was ₦ 105 892.00. Most indigenous business operators paid a minimum of ₦ 8 8420 per month or ₦ 290.00 daily. The level of tax payment per day or month may be too much on the shoulders of the indigenous business operators looking at the monthly average income of ₦ 15,260.00 if their businesses are not thriving.

Perception of indigenous business operators on tax policy

The perception of indigenous business operators on tax policy is presented in Table

Table 5: Distribution of perception of indigenous business operators on tax policy

Items	SA	A	D	SD	TOTAL	X
Multiple taxes weaken the capital base of the business	548	60	_	_	608	3.87
Unfriendly collection methods by both state and local government authorities discourage the intention for compliance.	180	210	84	_	474	3.01
Business taxes such as environmental and VAT is passed down to the consumer at a higher price	120	29	108	_	447	2.84
Multiple taxes affect the disposable income of small business owners	160	303	32	_	495	3.15
High taxes reduce the competence of business owners to expand their businesses.	200	210	74	_	488	3.10
Total mean						15.97
Grand Mean						3.194

Source: Field Survey, 2021

Table 5 shows the perception of indigenous business operators on tax policy. The response of indigenous business operators on the perception of different items indicated agreement since their mean response was more than 2.5. The mean value is an affirmation of all the items (1-5).

Furthermore, the grand mean of 3.194 signifies that the majority of the indigenous business operators agreed that items 1-5 were accurate about tax policy in Abia State. This suggests that government should eliminate laws and structures that promote illegal tax collection procedures/practices that negatively affect business activities in the State.

Effect of tax paid on the performance of indigenous businesses

The effect of tax paid on the performance of indigenous businesses is presented in Table 6

Table 6: Effect of tax paid on the performance of Indigenous businesses

Variable	F calculated	F tabulated	Prob. Level (1%)
Amount of Tax paid	294.022	10.9	0.000

Source: Field Survey, 2021

The result in Table 6 shows a positive and significant 1% relationship between tax paid and the performance of indigenous businesses. This means that as tax paid increased, the performance of indigenous businesses also increased. The increase in the performance of indigenous businesses could be associated with the resilience of the indigenous business operators to survive, not minding the circumstances in which they find themselves. They could adopt product diversification and effective sales/marketing strategies. The more the indigenous business operators adopt product diversification and effective sales/marketing strategies, the more they comply with the government's tax policies.

Factors influencing the amount of Tax paid by Indigenous businesses

Factors influencing the amount of tax paid by the indigenous business operators are presented in Table 7

Table 7: Factors influencing the amount of Tax paid by Indigenous businesses

Variable	Linear	Exponential	Semi log	Double log
Constant	29396.1 (1.883)*	10.3641 (58.004)***	-76063.3 (-6.421)***	2.472 (2.118)*
Age	-1902.6 (-3.256)***	-0.012 (-1.727)*	-122223.642 (-5.065)***	-1.139 (-4.793)***
Age of the Firm	4891.3 (3.233)***	0.051 (2.935)***	50151.140 (5.035)***	0.587 (5.985)***
Income Generated	0.051 (16.520)***	4.473E-007 (12.695)***	83812.179 (12.976)***	0.747 (11.739)***
Value of Assets	0.002 (2.911)***	3.133E-008 (3.642)***	183.717 (0.037)	0.076 (1.557)
Type of Enterprise	-2171.2 (-1.101)	-0.037 (-1.634)	-1053.813 (-0.494)	-0.025 (-1.194)
Business Registration	27170.6 (3.204)***	0.234 (2.412)*	50666.496 (-0.494)***	0.428 (4.996)***
R^2	0.746	0.681	0.713	0.733
R^{-2}	0.736	0.669	0.702	0.722
F-ratio	73.570***	53.404***	62.106***	68.636***

Source: Field Survey, 2021Note: Figures in Parenthesis are t-ratios, + Lead equation
*** Significant at 1% level, ** Significant at 5% level, * Significant at 10% level

Table 7 shows that the linear function form was chosen as the lead equation based on the value R^2(coefficient of multiple determination), F-ratio, numbers of significant variables, and the conformity of these variables to *prior* expectations. The value of R^2 (74.6%) implies that the total variation observed in the dependent variables was caused or accounted for by the independent variables. The value of the F-ratio was 73.570, indicating the model is statistically at 1%. Age, firm age, income generated, value of assets, type of enterprise, and business registration were significant variables influencing the amount of tax the indigenous business operators paid. The age of the respondents was significant at 1% and negatively related to the amount of tax paid. This means that as the age of the respondents increased, the tax paid decreased. This could be associated with less ability and willingness to take risks as the respondents grow older. The lesser the risk taken by the respondents, the less the investment into the indigenous businesses, and the less the return on investment, which can seriously affect the amount to be paid as tax by the respondents.

The age of indigenous firms was significant at 1% and positively related to the amount of tax paid. This means that as age (the capacity to handle indigenous business operations and challenges with less stress) increases, the performance of indigenous firms becomes greater. The greater the performance of business firms, the greater the propensity for indigenous firms to pay tax.

Income generated was significant at 1% and positively related to the amount of tax paid. This means that as the income is generated income, the amount of tax paid also increases. Better income generation could mean adopting better and viable indigenous business strategies/principles.

Asset value was significant at 1% and positively related to the amount of tax paid. This means that as the value of an asset increases, the amount of tax paid also increases. Value of assets means tangible and non-tangible resources that regularly support the advancement of indigenous businesses.

Business registration was significant at 1% and positively related to the amount of tax paid. This means that as indigenous business registration increased, taxes paid also increased. Registration of indigenous firms could mean legal backing/ recognition/ permission to carry out businesses without any fear of business molestation.

Test of Hypothesis

$H0_1$: There is no significant difference between the socio-economic characteristics and the amount paid on taxes.

Analysis of Variance (ANOVA) was used to analyze the hypothesis, and the result is presented in Table 8.

Table 8: Significant difference between the socio-economic characteristic and amount paid as Taxes

Model	Sum of Square	Df	Mean Square	F-cal	F-tab
Regression	7.312E+11	6	1.219E+11	73.5701	2.19
Residual	2.485E+11	150	1656404111		
Total	9.796E+11	156			

Source: Field Survey, 2021**.**Decision rule: if F-cal is > F-tab, reject the null hypothesis and accept the alternate; otherwise, accept the null hypothesis.

Table 8 shows that F-cal was 73.570 while F-tab was 2.19. So, we will reject the null hypothesis and accept the alternate hypothesis. Therefore, there is a significant difference between the socio-economic characteristics and the amount paid as taxes.

CONCLUSION AND RECOMMENDATIONS

The study concludes that the level of tax payment per month is on the high side and too much to shoulder by the indigenous business operators. Furthermore, indigenous businesses' perception of tax policy in the state did not conform with best practices evidence in the tax burden of operators. However, the operators of indigenous businesses have shown resilience in their operations. Age, firm age, income generated, the value of assets, type of enterprise, and business registration were significant variables influencing the amount of tax the indigenous business operators paid. In addition, there is a significant difference between the socio-economic characteristics and the amount paid as taxes. The study recommended that the government should engage operators of SMEs in the state to work out modalities to reduce their tax burden that will ultimately promote business activities in the state. Also, unwholesome tax practices should be eliminated to make the state the next business destination.

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SUB THEME
FINANCIAL MANAGEMENT, ACCOUNTABILITY AND ENDOGENOUS AFRICAN BUSINESSES

ASSET GROWTH AND PROFITABILITY OF FIRMS IN NIGERIA

Ibiam, Oti, Kalu, Nwannediya Faith, Eyisi, Adanma Sabina and Okafor, M.C.
Michael Okpara University of Agriculture Umudike
Corresponding author: prince.ibiam@gmail.com

ABSTRACT
The study examined the effect of asset growth on firms' profitability in Nigeria. Asset structures are made to offer the capital required to run businesses. Cash generated is frequently paid out as a dividend to shareholders to maximize capital gains, while residual earnings are reinvested. These companies periodically accumulate a higher percentage of current assets, the second class of assets. A critical question in this situation is how current and non-current assets contribute to profit production. The ex-post facto research design was adopted, and data was obtained from the selected companies' annual reports and financial statements. According to judgmental sampling, the study population consists of all quoted organizations listed on the Nigerian Stock Exchange, and the sample size is 20 quoted firms. The data were examined using panel data regression analysis. The findings demonstrated that the asset structure of listed firms in Nigeria, including non-current and current asset growth, had a positive and significant effect on return on equity. The asset structure of each company should be studied and evaluated regularly by the respective company management to enhance the organization's performance in Nigeria.
Keywords: Asset structure, Asset growth, Profitability, Return on equity, firms in Nigeria.

INTRODUCTION

Firms must buy enough raw materials to support the production line until the finished products are sold or funded. Stockpiles need to be refilled at that point. Businesses must expand their assets by increasing the diversity of the assets at their disposal and by applying new technologies to preserve their competitiveness and improve the future flow of benefits to the businesses. In several fields, including corporate asset management, study is required.

The organization's assets determine its ability to undertake projects and fulfill its obligations. Assets are a company's measure of its ability to persist and successfully compete with rivals. Companies are created to increase owner wealth. In order to do this, they take into account asset structures, which combine different asset components and allow them to make investments and fulfill contractual responsibilities. In order to balance asset and capital finance, management must assess financing activities and related initiatives. The asset structure offers the investor a suitable asset mix. The investor chooses to enhance non-current assets, decrease current assets, or do the opposite. This will guarantee that the business has enough cash to cover long-term investments and ongoing operational costs.

Additionally, using a capital structure plan will reduce payment obligations. Trading securities is a component of equity strategy to create funds for financing activities. On the other hand, the debt-based strategy considers interest rate changes, maturities, and the debt-to-equity ratio (Koh, 2012).

Additionally, organizations build up assets as collateral for obtaining financial services like loans and bid bonds. Additionally, assets are utilized as collateral when taking out loans from creditors to fund corporate operations. The future viability of a corporation and its capacity to fulfill its intended commitments are determined by its assets. In order to assure them of the security of their investments and the chance of seeing returns, investors are also worried about the company's assets.

Assets are likely future economic gains that an entity has control over or has acquired due to previous actions or occurrences (FASB, 2005). Physical and intangible assets are two categories into which assets are frequently divided. Current and non-current assets together make up the physical assets. For intangible assets, accounting rules stipulate certain criteria. As a result, the bulk of the assets listed in the companies' statements of financial position are physical assets (current and non-current). In this context, the term "asset structure" refers to a group of physical assets a firm has to launch and expand its business. The asset structure is important for several reasons (Reyhani, 2012).

First, businesses can only start up or grow with assets since they are required to create the products. These resources are a barometer for a company's ability to compete successfully and endure (Reyhani, 2012). Conversely, there is a strong correlation between capital and asset structures. When a company's asset structure is poor, it cannot borrow money, and when creditors do decide to lend money to someone else, they prefer to do so in exchange for tangible assets (Chen *et al.,* 2008). Due to a weak rental market, the enterprises are holding onto their assets. Because there is a tax incentive for economic growth and technical advancement, some businesses cling to assets (particularly non-current assets) (Dong *et al*., 2012).

According to Schmidt (2014), the asset structure comprises both current and non-current assets. An organization's assets determine its capacity to assume responsibilities and fulfill them. On the other hand, a

company's financial performance shows whether or not its financial objective was achieved. A company's financial health over the long run may be gauged by looking at its financial performance. Asset structure increases organizational productivity and effectiveness.

Asset sufficiency guarantees that a business pays its employees and suppliers on time, motivating them to put in extra effort to advance the company's success. A business can also successfully compete in the market if it offers excellent goods and services. This boosts the business's sales and client retention rates.

Because investors are driven to trade in securities, listed firms with the right asset mix tend to be liquid. The extra synergy that trading in securities offers helps the business to broaden its network of connections and seek new market niches. The returns on securities can be impacted by asset structure in either a favorable or negative way. (Aguzzi & Payne, 2007) The intermediate effect on a company's cash flows is highlighted.

Changing operational profit is a clear indicator of the indirect economic consequences of asset structure, which have a mild impact on a corporation. An unusual movement in a company's share price in a competitive market indicates such an influence. By ensuring that asset values appropriately represent the information that is accessible, an efficient market protects the rationality of investors. Asset structures are made to offer the capital required to run businesses. Cash generated is frequently paid out as a dividend to shareholders in order to maximize capital gains, while residual earnings are reinvested. These companies periodically accumulate a higher percentage of current assets, the second class of assets. A critical question in this situation is how current assets and non-current assets contribute to profit production. This subject is important since most enterprises in the industrial sector have a structure of destroyed assets. Some of these companies' asset ratios lean more heavily toward non-current assets than current assets, or vice versa, with current assets dominating non-current assets. This demonstrates that current assets contributed more to net profit than non-current assets. Asset turnover (current and fixed turnover) is used to gauge this contribution. In this respect, the majority of businesses lack intangible assets.

Business organizations are forced to use various financial solutions in response to financial difficulties. Many businesses have turned to mergers and acquisitions to increase synergy for service delivery, cut back on and combine some functions to stimulate innovation and raise operational efficiency for potential future growth. However, as businesses improve their operations and hone their competitive edges, they seriously threaten the expanding market share.

Due to ineffective resource and financial management, the performance of many businesses keeps declining; some have even been kicked from the capital market (Wamugu *et al*., 2014). Such a decision contradicts what the company's owners, who want to see it make significant advancements in the market, expect. For many years, inadequate asset structures have been an issue for contemporary firms. Asset kinds include current, intangible, and non-current assets. Therefore, anyone who is ignored will often have a detrimental effect on a company's success. Intangible assets are the most significant since they relate to a company's reputation and goodwill. However, most firms today ignore them because they are difficult to sense or touch. This negligence had a significant impact on how well Nigerian businesses performed. In other words, most businesses today fail due to weak asset structures, especially in Nigeria.

As a result, there is a discrepancy in the empirical findings between asset structure and company performance. While some findings indicate no effect, others suggest that asset structure positively influences businesses' performance. Due to these empirical inconsistencies, how an enterprise's asset structure influences its financial success in Nigeria is still being determined. In light of this, the study aimed to ascertain the impact of asset structure on the financial performance of Nigerian listed firms. Therefore, this study aimed to examine the effect of asset growth on firms' profitability in Nigeria and specifically examined the effect of non-current and current asset growth on the Return on Equity of quoted firms in Nigeria.

LITERATURE REVIEW

Asset Structure

The International Accounting Standard Board (IASB) defines assets as a corporation's resources due to earlier occurrences and from which it anticipates future financial advantages. Additionally, the contribution of the potential future economic gain may be examined in the entity's operational activities (IASB, 2018). Since all assets can potentially deliver future benefits or services, they share this property (Weygandt *et al.,* 2012).

The two fundamental categories of assets are current assets and non-current assets. The following two classifications for noncurrent assets are based on tangible and intangible noncurrent assets. In modern usage, the prior phrasing is property, plant, and equipment (PPE) or non-current assets. For an asset to be considered a fixed asset, according to Weygandt *et al.* (2012), it must meet two criteria: it must be used in regular business operations, rented out or used in the administration of products and services, and it must

be intended to be kept and used over an extended period. Examples of non-current assets are real estate, buildings, structures, and machinery.

IAS 16 paragraph 15 (IASB, 2013) mandates that PPE initial recognition be valued at cost if the assets may be classified as PPEs. IAS 16 lists the following three cost elements: (1) Purchase price, (2) directly attributable cost, and (3) initial estimate of demobilization cost. After recognizing a piece of PPE, an organization has an option about the measurement criteria to be applied. The two measurement techniques permitted under IAS 16 paragraph 20 are the cost model and the revaluation model (IASB, 2013). The model choice impacts the class of PPE, not just one specific item (Picker *et al.*, 2016).

The Concept of Non-current Assets Growth

Assets that cannot be turned into cash over a business year are referred to as fixed assets, also known as non-current assets (Scott, 2003). It comprises durable assets, including computers, furniture, machinery, buildings, and construction. Non-current assets, often known as fixed assets, provide more income than current assets but are riskier since they need a significant initial capital outlay and are more difficult to convert to cash.

The Concept of Current Assets Growth

Current assets are those that can be liquidated during a typical production cycle. An average manufacturing cycle lasts twelve months or one year. Convertible assets are often referred to as current physical assets. These consist of raw material inventories, items still being produced, completed goods, and commodities kept for resale. Fixed assets in one business may be current assets in another. Real estate held in inventory by real estate investment businesses, sales organizations, or builders is one example of such an asset; the same real estate would be a fixed asset for another business that buys it to use in a manufacturing line.In the accounts of other firms that buy the exact computers that computer manufacturing companies create for retail sale to utilize them in their production process, they are non-current assets.

According to Chen *et al.* (2008), net operational assets usually comprise a considerable fraction of overall assets. Second, there are several additional ways that assets might expand, including increases in cash, current assets, and long-term assets. Earlier research usually needed to distinguish between different asset growth models and their effects on stock prices. At the very least, there is a contrast between domestically developed asset expansion, or "organic" development, and the purchase of assets from other businesses that may be significant. According to Wisegeek (2015), investing in enterprises with less experience results in disappointing stock returns.

The Concept of Net Assets Growth

Total assets minus total current liabilities equals net assets. When no non-current obligations exist, a company's net asset value is the same as its equity or shareholder cash. Asset values are typically presented on the Statement of Financial Position at historical costs, less any relevant impairment charges and cumulative depreciation. In certain circumstances, the disparity between historical cost and present market pricing may be rather large. Liabilities are all shown in the column on the right at market value.The discrepancy between historical cost and present market value is caused by generally accepted accounting principles (GAAP), which mandate that a company's assets, liabilities, and net worth values be based on former expenses. This means that the anticipated net asset value number must adequately reflect the shareholders' equity and the net assets. In order to calculate the correct value of net assets, it will be crucial to verify the assets' current market worth. This will only be crucial if the business merges, is purchased, or is liquidated (Farkoosh *et al.,* 2012). However, for this study, the net assets, or shareholder's money, were calculated using the historical cost of the assets.

Intangible Asset

Some intangible assets are not included in other financial statements as they are difficult to assess monetarily. According to Martina (2015), an organization's intellectual capital is a collection of knowledge assets largely responsible for boosting its capacity for competitive advantage by generating value for its major stakeholders. Maggina and Tsaklanganos (2012) claim that "the invisible, intangible part of the balance sheet can be categorized into a family of three: individual competence, internal structure, and external structure." Leif Edvinsson is cited by Niresh (2012), who contrasts the amount of intellectual capital to both human capital and structural capital (e.g., relationships with consumers, network management, and information technology). According to Amato and Burson's 2007 research, surplus ROA intellectual capital comprised intangible assets related to people, clients, and structures. Therefore, the knowledge and technological advancements that may provide a business a competitive advantage are provided by the three main organizational components of human capital, structural capital, and customer capital, which may be summed up as intellectual capital. According to Aladwan and Saaydan (2015), the market value of these businesses is more than their net asset value or the value of their physical assets. The company's "hidden value," which can be stated as a percentage of market value, is the difference between the two figures. These statements imply that the primary element that may raise a

company's market worth is its intellectual capital. In business, measuring intellectual capital is crucial. With measurement, resources would be allocated efficiently, and the firm and investors would receive consistent information. Aladwan and Saaydan cite Commissioner Wallman's perspective, which claims that two distinct direct procedures and three different indirect strategies may be utilized to evaluate and report a company's intellectual capital.

Financial Performance

Different writers have different definitions of performance. For instance, Wooldridge (2013) defined performance as the results, accomplishments, or contributions that a person or a group of people make independent of the desired or necessary course of action. According to Xuan and Hong (2016), performance is the completion of specific, accurate, quantitative, worthwhile, and personally meaningful goals. Performance is the ability of an organization to obtain and manage resources in various ways to gain a competitive advantage. Creative performance and financial or economic performance are the two types of performance that are frequently differentiated in literature. The performance of the economy was the study's main subject.

Yahaya (2011) defined financial performance as the organization's overall financial health over a given period. The financial performance analysis process may determine a company's financial performance over a specific period. According to Xuan and Hong (2016), financial performance analysis measures the outcomes of a firm's policies and activities. Financial performance analysis identifies a company's operating and financial features from its accounting and financial statements. The analyst looks for signs, such as the company's liquidity, profitability, and other indications, indicating the firm is being managed regularly and sensibly, producing sufficient returns for shareholders to maintain at least its market value.

Financial statements are used in financial analysis.A financial statement is a set of information rationally and consistently arranged according to accounting principles. Its goal is to educate readers on some of the financial aspects of a business. For example, a declaration of financial status may illustrate a position through time. On the other hand, an income statement can display several actions that took place during a specific time frame. The Statement of Financial Position and the Income Statement (together with any notes attached) are the two basic statements typically understood when the phrase "financial statements" is used.

Growth of the Fitter Theory

Alchian initially proposed the Growth of the Fitter hypothesis in 1950. This concept holds that firm profit is a proxy for firm health, with profitable firms growing and surviving in the market while failing firms are forced to shut down. According to Alchian's (1950) theory, fitter businesses develop and survive, while stronger ones lose market share due to evolutionary selection. Because profit rates are a good indicator of fitness, it is easy to forecast that profitable companies will expand. According to Alchian (1950), more prosperous businesses may be better positioned to expand since they have already demonstrated a greater aptitude for their surroundings and can fund future competitive measures with their cash flow. Profitability demonstrates an appropriate degree of market demand while reducing the risk associated with procuring and depending on other sources of finance. According to Alchian (1950), profit gives the means for expansion. Supporting development initiatives enables a firm to grow on an internal level in several different ways. Research and development may be used to advance technology, resulting in product and process improvements. Empirically, the organization places a high value on corporate expansion and profitability, but there has yet to be a clear connection between the two. According to several academics, profitability has a favorable impact on business expansion.

Empirical Review

Weygandt *et al*. (2019) examined the relationship between asset structure and firm performance in the Nigerian banking sector. The study's secondary data was examined using regression analysis. The results demonstrated a positive and significant relationship between asset structure and financial performance.

Zakaria (2019) examined the financial results of a few industrial companies listed on the Muscat Securities Market (MSM) to determine the impact of asset structure (current and non-current assets). A sample of 28 out of 70 (or 40%) annual reports from companies between 2008 and 2012 were evaluated for the study. While return on assets (ROA) and return on equity (ROE) measure financial performance, current and non-current asset turnover examine the asset structure. In the study, two significant hypotheses are examined. The first looks at how total asset turnover affects ROA, while the second looks at how total asset turnover affects ROE. The study's key finding is that profitability in terms of ROE is not greatly impacted by asset structure. As a result, even if asset structures change, the ROA will not change. Another study conclusion demonstrates that, unlike ROA, only non-current assets impact ROE. According to another study's conclusion, asset structure impacts ROE solely on the petrochemical industry.

Taiwo (2019) examined the relationship between asset structure and corporate performance in the Nigerian banking sector. The study's secondary data was examined using regression analysis. The results demonstrated that asset structure and financial success correlate strongly and favorably.

Suleiman and Nour (2019) researched how capital structure influences asset structure and business value. The assets are the cornerstone on which financiers rely on their confidence to lend to a firm since they guarantee that investors will get their money back. Multiple regression analysis was used to examine the study's data, including secondary data. These funds enable the company to grow and increase productivity. Consequently, the business finally makes more money. The findings showed that the asset structure considerably influences the firm's value. Firms only appeared to fully consider all issues before deciding on the composition and modification of their capital structures, which hurt their values. Management of companies should employ regular capital structure monitoring and control systems to ensure that any adjustments made provide value to their firm over the long term.

Lopes and Martin (2018) studied the association between the revaluation of non-current assets and future firm performance in Indonesia. The aim is to find the answer to whether Indonesia's government's decision to issue a temporary tax cut policy is effective to the extent it enhances the future performance of Indonesian firms. Multiple regression analysis is employed to observe the effect of the revaluation of the non-current assets on the future firm performance. Future firm performance is operationalized using the operating income and cash flow changes for one and two subsequent years. This study utilized the revaluation of non-current assets data in 2015 since the temporary tax cut for non-current assets revaluation was started that year. The result shows that Indonesian firms' revaluation of non-current assets is significantly positively associated with changes in operating income in one subsequent year after revaluation. This result implied that the benefits of fixed asset revaluations are realized in the subsequent year, and motivation for revaluation is mainly related to the effort to disclose the fair value of the non-current assets to the user of financial statements. Meanwhile, Indonesian firms' revaluation of non-current assets has a statistically insignificance negative association with the future operating cash flow after two subsequent years of revaluation. These findings lead to the conclusion that the temporary tax cut policy is effective enough to foster the future operating income of Indonesian firms.

Barlev *et al.* (2018) examined the effect of current assets management on the financial performance of firms. Current assets' structure and size and impact on the firm's financial performance must be balanced. A literature gap exists, thus motivating the author to develop a multiple correlation and regression model that uses current assets management to forecast changes in the financial performance of deposit money banks in Nigeria. These parameters include cash and bank balances, financial assets held for trading, derivative assets, loans and advances to banks, and customer loans and advances. An OLS model was formulated to compute the effect of CAM on financial performance. For model validation purposes, a five-year data analysis was conducted. The study's sample utilizes data from 2010-2014 belonging to 15 deposit money banks operating in the financial services sector as listed by the Nigerian Stock Exchange (NSE). The data was analyzed using multiple regression analysis. In empirical analyses, a robust estimator was used. The results of the analyses suggest a positive relation between the cash and bank balances, financial assets held for trading, loans, and advances to customers, and return on assets. Another result of the study, on the other hand, suggests that derivative assets, loans, and advances to banks have a negative impact on return on assets.

Barber and Lyon (2018) examined the relationship between the asset structure and the financial performance of the firms quoted under the commercial and service sector at the NSE, Kenya. The study's target population was the secondary data from the firms' annual reports. The asset structure is analyzed in terms of property, plants, and equipment; current assets; intangible assets; and long-term investments and funds, which form the independent variables. The dependent variable of interest was the financial performance of the firms and was measured in terms of earnings per share, return on assets, return on equity, profit margin (return on sales), and current ratio, with the aid of a composite index. A census was done on all the firms listed under this sector by 2014 for a five-year period, 2010 to 2014. A document review guide was used to collect the secondary data from the financial statements of the firms under study. A multiple regression analysis (standard) was conducted using the statistical program SPSS version 21. The study's results indicate that asset structure had a significant statistical effect on financial performance. In particular, the study found that Property, Plants and Equipment, and long-term investments and funds statistically affect financial performance. In contrast, current and intangible assets do not statistically impact financial performance. This study concluded that firms should increase the allocation of resources towards long-term investments and funds and utilize available resources effectively in terms of property, plant, and equipment.

METHODOLOGY

The research design adopted *an ex post facto* design. *Ex-Post Facto*r design was used where the researcher had no control over the exogenous variable, and whatever happened occurred before the research.

The research population comprises 162 of Nigeria's listed firms (Nigeria Exchange Group Fact Book 2020). Twenty firms listed on the Nigeria Exchange Group comprise the study's sample size.

The annual reports and financial statements of the listed firms in Nigeria from 2017 to 2021 were utilized to develop secondary data for this study.
The hypotheses were assessed using multiple regression analysis based on ordinary least squares. The effects of one dependent variable on two or more independent variables are compared using multiple regression analysis.
The study adopted the model of Inyiama, Ugbor, and Chukwuani with little modification to suit the objectives of the present study.
$ROA = \beta_O + \beta_1 NCAG_{it} + \beta_2 CAG_{it} + \beta_3 IAG_{it} + \beta_4 NAG_{it} + Ui$......(1)
The model was modified to suit the present study. The modified model is stated thus:
$ROE = \beta_O + \beta_1 NCAG_{it} + \beta_2 CAG_{it} + Ui$..........................(2)
Where
ROE = return on equity
NCAG = non-current asset growth rate
CAG = current asset growth rate
$\beta_{O} =$ Intercept
β_1 to β_2= Parameters to be estimated
Ui= Stochastic Variable

RESULTS AND DISCUSSIONS

Data Presentation

Regression analysis was employed to assess the effects of the various components. The dependent variable was return on equity (ROE), while the independent variables were non-current and current asset growth (CAG). The significance of the entire model was evaluated using the adjusted R square, which is the coefficient of determination, and the F statistic. The study's hypotheses were specifically tested, and the association between the variables was established using the likelihood of the F-statistic test.

Pre-Estimation Tests

Table 1: Descriptive statistics

	NCAG	CAG	ROE
Mean	2223.242	435.8281	1.157750
Median	0.076448	-2.486392	0.146916
Maximum	214794.2	16663.89	9.449578
Minimum	-100.0000	-100.0000	-5.649407
Std. Dev.	21474.96	2167.525	2.147181
Skewness	9.844987	5.879478	1.319430
Kurtosis	97.95275	39.19005	6.046882
Jarque-Bera	39182.16	6033.303	67.69611
Probability	0.000000	0.000000	0.000000
Sum	222324.2	43582.81	115.7750
Sum Sq. Dev.	4.57E+10	4.65E+08	456.4282
Observations	100	100	100

The descriptive table above shows the findings of the descriptive or summary statistics of numerous variables (NCAG, CAG, and ROE). The summary statistics were used to compare the data set's central tendency, dispersion, and normalcy metrics. The measures of dispersion considered in this study were the minimum value, the highest value, and the standard deviation. According to the E-view result, the dataset for NCAG, CAG, and ROE had minimum values of -100.0000, -100.0000, and -5.649407 and maximum values of 214794.2, 16663.89, and 9.449578. Measures of central tendency were used to compare the mean and median values of the data set. The findings revealed that the mean values for NCAG, CAG, and ROE were 2223.242, 435.8281, and 1.157750. The data set's normal distribution is determined using the normality test. Skewness and Kurtosis were examined in this study as indicators of normality. Skewness was used to determine how asymmetric the series was. The show may be slanted positively or negatively or just generally.
The distribution is positively skewed and has a long right tail when the skewness value exceeds the sampling mean. The mean is lower when a distribution has a lengthy left tail and a negative skewness. According to the E-view result, the NCAG, CAG, and ROE skewness values were 9.844987, 5.879478, and 1.319430, respectively. The result showed that all variables have skewness values larger than the sampled mean. This implies that the data set meets the normality assumption.

Finally, Kurtosis measures how flat or peaks the data are compared to a normal distribution. Kurtosis may be mesokurtic, leptokurtic, or platykurtic. A mesokurtic distribution, or a normal distribution, is indicated by a kurtosis of 3.0000. A kurtosis value of more than 3.0000 is called leptokurtic or positive Kurtosis, which has a peaked curve and produces higher values than typical. When the Kurtosis is less than 3.0000, it is called platykurtic or negative Kurtosis, resulting in a flat curve with values lower than the sample mean.

The NCAG, CAG, and ROE kurtosis values were 97.95275, 39.19005, and 6.046882, respectively, as shown by the dataset's findings from Table 4.2. Consequently, all the variables are platykurtic, meaning each produced lower results than the sample mean. This also implies that the data set meets the normality assumption.

Stationarity/ unit root tests

A unit root test was carried out to ensure that the variables employed in this study are mean reverting, i.e., stationary. For this purpose, the Augmented Dickey-Fuller (ADF) test was utilized, and the test result is presented in the table below.

Table 2: Augmented dickey fuller (ADF) test

Variable	ADF Stat	5% Critical Value	P-value	Level Form
NCAG	-9.958223	-2.890926	0.0000	At level
CAG	-10.29118	-2.890926	0.0000	At level
ROE	-6.000997	-2.890926	0.0000	At level

Source: extraction from Appendix 1

The table above is the result of the first test required to know the individual stationarity of the variables. The Augmented Dickey-Fuller (ADF) unit root test result can be interpreted using either the t-statistic or the p-value. A variable is stationary if the ADF t-statistic in absolute terms is greater than the ADF 5% critical value or the p-value is less than or equal to 0.05 significance level. Table 4.1 above shows that all the variables are stationary at the level. According to Gujarati and Porter (2007), a non-stationary time series can be made stationary through integrated series by differencing. Hence, since all the variables are stationary, there is no need for co-integration text.

Table 3 Hausman result

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.400249	2	0.0248

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
CAG	-0.000017	-0.000025	0.000000	0.5256
NCAG	0.000238	0.000213	0.000000	0.0366

The Hausman test is used to differentiate between the fixed effects model and the random effects model in panel data. In this case, the random effect is preferred under the null hypothesis due to higher efficiency, while under the alternative, fixed effects are at least as consistent and thus preferred.

In this case, fixed effect panel data is preferable. This is because the null hypothesis was rejected (a p-value of 0.0248 is less than 0.05).

Table 4 Panel data regression result

Dependent Variable: ROE
Method: Panel Least Squares
Date: 10/10/23 Time: 08:17
Sample: 2017 2021
Periods included: 5
Cross-sections included: 21
Total panel (unbalanced) observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.154483	0.143394	8.051129	0.0000
NCAG	1.98E-07	7.29E-06	0.027101	0.9784
CAG	8.50E-06	7.11E-05	0.119671	0.9051

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.672121	Mean dependent var	1.157750
Adjusted R-squared	0.578441	S.D. dependent var	2.147181
S.E. of regression	1.394112	Akaike info criterion	3.701028
Sum squared resid	149.6532	Schwarz criterion	4.300217
Log-likelihood	-162.0514	Hannan-Quinn criteria.	3.943530
F-statistic	7.174668	Durbin-Watson stat	1.975373
Prob(F-statistic)	0.000000		

The panel data results demonstrate how asset growth affects the return on equity for listed firms in Nigeria. The explanatory variables (NCAG and CAG) only account for 67.2% of the sample variance in profitability (ROE), the dependent variable, with an R-square of 0.672, leaving 33.8% of the variation unexplained. Unaccounted-for circumstances or outside influences could bring about the remaining 33.8%. A high R-square value denotes a favorable correlation between the independent variables (NCAG and CAG) and the dependent variable (ROE). The overall relevance of the model was also determined using the F-statistic. The F-statistics of 7.174668 and p-value of 0.000000 showed that the model is statistically significant at a 5% significance level. The adjusted R^2 of approximately 0.578 indicates that if other factors are considered in the model, this result will deviate from it by only 0.09 (i.e., 0.672 – 0.578). This result shows that there will be a further deviation of the variation caused by the independent factors to be included by 0.09%.

The regression result in Table 4 above to determine the relationship between NCAG, CAG, and ROE shows that when all the independent variables are stationary, the ROE variable is estimated at 1.154483. This implies that when all independent variables are held constant, there will be an increase in the ROEof listed firmsup to 1.154483% occasioned by factors not incorporated in this study. Thus, a unit increase in NCAG will lead to an increase in ROE by 1.58%. For CAG, a unit increase in CAG will lead to an increase in ROE by 8.50%.

According to the Durbin-Watson autocorrelation test, the Durbin-Watson value of 1.975373 does not lie inside the crucial region of the Durbin-Watson partition curve. Therefore, it is evident that autocorrelation is not present.

Finally, the probability value of 0.00000, less than 0.05, indicates that asset structure significantly affects the profitability of listed firms in Nigeria. This implies that non-current asset growth and asset growth have a positive and significant effect on the profitability (ROE) of firms in Nigeria.

Discussion On Results

The findings of the hypothesis tests showed that asset growth (current asset growth and non-current asset growth) has a positive and significant effect on the return on equity of listed firms in Nigeria. The decision was made because the P-value of 0.0000 was less than 0.05. The result is consistent with the result of Weygandt *et al*. (2019), who examined the relationship between asset structure and firms' performance in Nigeria. The study was carried out using secondary data and regression analysis. The result revealed a significant positive relationship between asset structure and financial performance.

On the contrary, Zakaria (2019) carried out a study on the effects of asset structure (non-current assets and current assets) on the financial performance of some manufacturing companies listed on the Muscat

Securities Market (MSM). The overall result of the study is that the structure of assets does not have a strong impact on profitability in terms of ROE. This result means that if the structure of assets changes, then the ROA will not change. Another result of the study indicates that only the non-current assets have an impact on ROE, unlike ROA. Another result of the study suggests that the effect of asset structure has an impact on ROE only in the petrochemical sector.

CONCLUSION AND RECOMMENDATIONS

The study focused on how asset structure affected the financial performance of listed firms in Nigeria. Secondary data were employed in the study. Non-current asset growth, current asset growth, intangible asset growth, net asset growth, and return on equity were used to evaluate asset structure and performance. According to the empirical studies, most studies only used current and non-current asset growth indicators for asset structure, neglecting additional elements such as net and intangible asset growth. All of the variables are used in this study. The selected Nigerian listed quoted corporations provided the data. After a few pre-estimation tests, the data were examined using panel data-based multiple regression. The investigation results demonstrated that asset growth (non-current asset growth and asset growth) has a positive and significant effect on the profitability (ROE) of firms in Nigeria. Based on the findings of the study, the following recommendations are made.

Separate company management should periodically examine and evaluate each firm's asset structure to ensure that the composition fulfills the strategic goals of the firm in order to increase the return on equity of businesses in Nigeria.

Managers of all organizations should devote more resources to long-term investments and funding to improve their financial performance, which would lead to higher earnings per share. Businesses in Nigeria should invest more in property, plant, and equipment in order to increase return on equity.

This study also guides the finance profession in carefully considering corporate asset structures when creating financial regulations and SOPs. Asset structure should be considered since it substantially impacts return on equity, which is necessary to maintain budgetary control and assure these corporate organizations' long-term financial success.

Alternative variables should be utilized to guide asset structure investment because they have minimal effect on profitability. Therefore, goods may be bought just in time to reduce the costs related to holding inventory.

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MONETARY POLICY AND HOUSEHOLD CONSUMPTION EXPENDITURE IN NIGERIA

Mgbemena Onyinye .O and Osuji Obinna
Department of Economics, Michael Okpara University of Agriculture, Umudike, Nigeria.
Corresponding Email: osuji.obinna@mouau.edu.ng

ABSTRACT
The study investigated the complex link that exists in Nigeria between household consumption expenditure and monetary policy from 1981 to 2019. The study used various statistical techniques and information from the Central Bank of Nigeria's yearly releases. Several statistical tests were used in the investigation, including co-integration tests, ordinary least squares, error correction models, and unit root tests to determine stationarity. The empirical results provided some fascinating new information. The broad money supply followed a normal distribution pattern throughout the time, with a very low probability value of 0.000073%. The statistically normal distribution trend was also observed in exchange rates, with a probability value of 0.044926%. Similarly, the focal dependent variable, household consumption spending, showed a significant normal distribution, as evidenced by the 0.041% probability value. Interest rates supported their place in the regression analysis by following a normal distribution at the 0.041% level of significance. Especially noteworthy was the study's finding that the nation's household consumption expenditure increased in tandem with the amount of broad money supply over time. On the other hand, household consumption expenditure and exchange rates showed a negative association, indicating that households may boost their spending by carefully managing the exchange rate. Furthermore, it was discovered that interest rates affect household consumption expenditure, with a 4.24% decline in consumer expenditure over time resulting from an increase in interest rates. Based on these findings, the monetary authorities in Nigeria should consider raising the broad money supply to boost economic activity. In addition, the government should establish a stable exchange rate through the Central Bank of Nigeria to stimulate increased household consumption. Finally, the study emphasizes how crucial it is to monitor and stabilize interest rates to sustain household savings and consumption.
Keywords: Household Consumption Expenditure, Money Supply, Monetary Policy Rate

INTRODUCTION

The Nigerian economy has grappled with persistent challenges despite various changes in monetary, fiscal and macroeconomic policies, hindering the realization of its economic potential for rapid development. There remains to be debate about the effectiveness of monetary policy in promoting growth and development due to conflicting research outcomes. Achieving macroeconomic goals across developed and developing economies, like full employment, price stability, sustainable household consumption, and external balance, has always been a policy priority. These goals require guidance through economic policy, with fiscal and monetary policies as the primary instruments to reach them (Akekere &Yousuo, 2012).

Fiscal policy employs public expenditure and taxation, while monetary policy employs reserve requirements, discount rates, and open market operations. Their interdependence is evident, given the significant impact of fiscal policies on household consumption expenditure and development. Age, gender, family size, and current income influence individual spending habits. However, when income experiences fluctuations, consumption behaviour becomes more aligned with long-term circumstances. This leads to a reconsideration of income for predicting consumption and savings patterns. Household consumption trends reflect national income trends and play a vital role in understanding both short-term business cycles and long-term consumption patterns (Alimi, 2013)

In household behaviour, consumption expenditure and savings are crucial components influenced by household income. Achieving a balance between consumption and savings is essential to meet budget constraints and individual needs, making consumption a linchpin of household well-being and socioeconomic factors. Consumption expenditure encompasses spending on durable and non-durable goods, representing the utilization of goods and services to attain individual or societal satisfaction. Household consumption expenditure contributes to a country's gross domestic product, reflecting the total monetary value of all final goods and services produced within the country's borders.

Monetary policy serves multiple objectives, including maintaining domestic price stability, achieving full employment, promoting sustainable household consumption expenditure, ensuring balance of payments equilibrium, and exchange rate stability. It involves actions by the central bank or competent monetary authority to control the money supply and the channels for introducing new money into the economy. This includes managing money supply and interest rates to achieve macroeconomic goals such as controlling inflation, fostering growth, and maintaining liquidity. The central bank plays a key role in

shaping monetary policy, which guides money supply, interest rates, and economic activity (Sakib-Bin-Amin, 2011).

In a broader sense, monetary policy encompasses measures designed to regulate money's value, supply, and cost according to anticipated economic activity levels. These measures aim to achieve price stability, balanced payments, employment promotion, output growth, and sustainable development. These objectives are essential for achieving internal and external balance and fostering long-term household consumption expenditure. The study seeks to assess the impact of monetary policy on household consumption expenditure in Nigeria.

Monetary-Induced Consumption Problems

The challenge of sustaining economic growth in Nigeria remains a pressing concern. This is primarily due to the low household savings, which are crucial for accumulating capital to finance aggregate investment necessary for household consumption expenses. It is widely acknowledged that inadequate savings and high interest rates play a significant role in declining household consumption and investment in the Nigerian economy and other less developed countries (LDCs). In light of these impediments, there is a clear imperative to explore the influence of household savings and consumption on household consumption expenditure. The interplay between household savings and consumption in Nigeria represents a critical macroeconomic determinant of great interest to policymakers and the public alike. Savings are a pivotal macroeconomic factor for enhancing individual well-being and a nation's economic prosperity. National governments are particularly keen on stimulating domestic savings to achieve sustainable and robust economic growth.

A study by Oduh *et al*. (2012) argued that during periods of significant economic stress, consumption expenditures are susceptible to uncertain "expectational vistas." These uncertainties can pose challenges for both fiscal and monetary policy management. One such exceptional vista is an increase in the price level, which results in inflation. Inflation erodes the value of consumers' cash holdings, reducing their purchasing power and leading to a decline in consumption expenditure and a downward trend in savings. Notably, statistics from the Central Bank of Nigeria's statistical bulletin reveal that while inflation averaged 31.10% and 22.56% between 2000-2005 and 2007-2012, savings declined by an average of 4.74% from 2011 to 2015. Meanwhile, private consumption expenditure experienced average growth rates of 15.66%, 0.21%, and 3.68% during the same period, according to data from the Central Bank of Nigeria in 2014 and 2015. This fluctuation in the relationship between these variables over time underscores the need to investigate the impact of money supply on household consumption expenditure in Nigeria.

LITERATURE REVIEW

The purposeful application of monetary instruments, both direct and indirect, by monetary authorities, such as central banks, to attain macroeconomic stability is known as monetary policy. In essence, monetary policy is the instrument used to mandate price and monetary stability. In order to achieve preset macroeconomic goals, monetary policy is a programme of action implemented by the monetary authorities, usually the central bank, to govern and regulate the public's access to money and the flow of credit (Jhingan, 2002).

Therefore, it has been shown that monetary policy is an essential tool a nation can use to maintain exchange rate and domestic price stability, a prerequisite for achieving both external viability and sustainable economic growth (Adegbite &Alabi, 2013). Depending on the nation's economic situation, monetary policy may be deflationary or inflationary. In order to prevent inflation, contractionary policy is used to reduce the money supply, and expansionary policy is used to boost economic activity to reduce unemployment during a recession.

According to Mishkin (2016), monetary policy objectives involve managing several monetary targets, including full employment, growth promotion, price stability, business cycle smoothing, financial crisis prevention, long-term interest rate stabilization, and real exchange rate stability. Monetary authorities, directly and indirectly, control the demand for money, money supply, or availability of money (overall liquidity) through the control of monetary policy targets such as the price of money (interest rate - both short term and long term), the quantity of money, and reserve money, among others (Backus & Smith, 1993). This has an impact on private sector investment and output.

Theoretical Review

The life cycle theory—a significant post-Keynesian theory of consumption—was advanced by Modigliani and Ando. The life cycle theory states that lifelong expected income, rather than current income during any given moment, determines consumption. Accordingly, the life cycle hypothesis postulates that people plan their spending patterns based on their lifetime income. Furthermore, it is believed that each person maintains a largely constant or slightly rising level of consumption.

However, his aspirations for his lifetime salary restrict this degree of expenditure. According to this hypothesis, a normal young person spends his early years consuming goods by borrowing from others or using the money his parents left him.

During most of his working years, he saves more money overall because his consumption is lower than his income. He uses these savings to invest in assets, building up riches he will eventually spend. Once more, he dissipates or uses more than he makes during these final years of hislife, but he can sustain or even significantly raise his consumption in the post-retirement era.

With a lifespan of 75 years as an example, the Life Cycle Hypothesis (LCH) assumes that people have complete awareness of how long they will live. The Life Cycle Hypothesis (LCH) also states that a person's lifetime savings will equal zero. Savings made during their working years equalize savings made before and after retirement.

In this scenario, the person begins working at age 15 and does not receive interest on savings. They must borrow because their income is insufficient to support their costs till they are 25. They save from age 25 to 65, building up assets that are utilized to pay for post-retirement needs. When income is insufficient to cover expenses after retirement (age 65), accumulated assets are used to close the difference. It is assumed that no assets are left for the kids, meaning no savings.

In conclusion, LCH claims that present wealth influences consumption and that people plan their lifetime spending based on predicted lifetime income. An individual consumes 1/T of their lifetime income annually, given a specified age, remaining life expectancy (T), and years till retirement (N). This can be written as an equation.

$$C_t = 1/T\,(Y_{Lt} + (N-1)Y^eL + W_t)$$

Where:

C_t = the consumption expenditure in the current period t

Y_{Lt} = Income earned from doing some labour in the current period t

N-1 = remaining future years of doing some labour or work

Y^e_L – the average annual income expected to be earned over N-1 years for which an individual plans to do some work

W_t = the presently held wealth or assets

It will be observed from the above equation that the life cycle hypothesis suggests that consumption in any period does not depend only on current income but also on expected income over his entire working years. Besides, consumption in any period also depends on presently owned wealth or assets built up during the prime working years of one's life when income exceeds savings.

Empirical Studies

Onwuteaka *et al*. (2019) examined the effect of monetary policy on economic growth in Nigeria using secondary data from the Central Bank of Nigeria statistical bulletin covering the years 1980–2017. The model's estimations were estimated using multiple econometric models of the ordinary least square to ascertain the effects of the money supply, credit in the economy, interest rate on credit, infrastructure, inflationary rate, external debts, and price index on growth in Nigeria. The findings show that whereas other research variables were found to be statistically unimportant in describing the growth rate of the Nigerian economy, infrastructure, external debt, interest rates on credit, and money supply all statistically explain the impacts of economic growth. The report recommended, among other things, that total autonomy over monetary policy functions be granted to the Central Bank of Nigeria to ensure the successful implementation of monetary policy measures in the Nigerian economy. Partial autonomy should be replaced with full autonomy for central banks, especially those in developing nations, which are typically susceptible to political interference from the government.

By developing a model that can use multi-variable regression analysis to examine how the government's monetary policy has affected economic growth, Ayodeji and Oluwole (2018) looked into the impact of monetary policy on economic growth in Nigeria. For monetary policy instruments, the study employed the Money Supply (MS), Exchange Rate (ER), Interest Rate (IR), and Liquidity Ratio (LR) as proxy variables. The GDP, or gross domestic product, was used to calculate economic growth at constant prices. Their results indicated that the exchange rate and money supply had a small but positive impact on economic growth. The argument that monetary policies are more successful when they are used to contain inflation rather than to foster growth is supported by the fact that measures of interest rates and liquidity ratio, on the other hand, had a disastrous but extremely substantial impact on economic growth. The Engle-Granger co-integration test was also performed, and the results showed a long-term relationship between economic growth and Nigerian monetary policy. Lastly, the variables were subjected to the Granger causality test, and the findings showed that money supply and economic growth have a unidirectional causal relationship, and interest and economic growth have a bidirectional causal relationship. The liquidity ratio and economic growth have a Granger causal relationship. Therefore, the

report recommended that Nigeria's central bank, which is continually subject to interference from the government and its politics, be given complete autonomy.

Ufoeze *et al.* (2018) looked at the impact of monetary policy on economic growth in Nigeria. The natural log of the GDP was used as the dependent variable, and the monetary policy rate, money supply, exchange rate, loan rate, and investment were used as the explanatory monetary policy variables. The time series data cover the market-controlled period from 1986 to 2016. The unit root and co-integration tests were also conducted as part of the study using the Ordinary Least Squares approach. The investigation proved that the factors are related over an extended period. The primary finding of this research also showed that monetary policy rates, investment, and interest rates had very little positive effects on Nigeria's economic growth. On the other hand, the money supply significantly boosted Nigeria's growth. Nigeria's GDP was significantly impacted negatively by exchange rates. In Nigeria, interest rates result from economic growth driven by the money supply and investment opportunities. Monetary policy accounted for 98% of Nigeria's economic growth variations. The study concluded that monetary policy is a useful instrument for improving output and maintaining price stability because it can be utilized to govern the Nigerian economy successfully.

Using a model based on the Keynesian consumption function, where consumption is explained by fluctuations in income, C= f(Y), Ezeji and Ajudua (2015) investigated the factors influencing aggregate consumer expenditure in Nigeria. The consumption expenditure postulates were incorporated into the model specification based on other explanatory variables besides current income. Therefore, income, interest, inflation, and exchange rates were the explanatory variables, while gross consumption expenditure was the dependent variable. In addition to demonstrating that the Nigerian consumption function adheres to the Keynesian consumption model, the study also demonstrated a positive relationship between consumption expenditure and income. It included the concepts of other well-known theories, such as interest rate, price level, and exchange rate, as significant variables explaining Nigerian consumption behaviour. Suggested solutions were measures to control inflation, create jobs to give more Nigerians access to greater purchasing power, and stop the naira's ongoing depreciation.

METHODOLOGY

In the words of Onwumere (2009), a research design guides investigators while conducting their studies and analysis. An ex-post facto research strategy was selected for this study, mainly because the researcher wants to watch events over a long period (1981-2019) and keep variables the same. This decision is further supported by using current secondary data for hypothesis testing.

The present study's empirical model is grounded in the Keynesian IS-LM framework, as proposed by McCallum (1991). This aligns with earlier studies conducted by Fasanya *et al.* (2013), who included the money supply, interest rate, inflation rate, exchange rate, and foreign reserve in their real gross domestic product study. Adegbite and Alabi (2013), who regressed economic growth (measured by GDP) on industrial production output, inflation, money supply, exchange rate, and interest rate, are also cited in this work.

Changes have been made in the present research to account for household consumption expenditure to evaluate Nigerian households' spending patterns and habits and the monetary policy rate to capture the central tool of monetary policy that influences other monetary policy aims.

HCE = f(BMS2, EXCHR, INT, MPR)………………………………………… 1

$$HCE = \beta 0 + \beta 1BMS2_{t-1} + \beta 2EXCHR_{t-1} + \beta 3INT_{t-1} + \beta 4MPR_{t-1} + €i$$

Where: HCE = household consumption expenditure; MPR = Monetary policy rate;BMS2 = Money supply proxied by the broad money supply (M2);EXCHR = exchange rate and INT = Interest rate proxied by bank lending rate.

RESULT AND DISCUSSION

This research investigated how monetary policy affected household consumption expenditure in Nigeria over a thirty-nine-year period. For 2019, the Central Bank's annual financial papers provided statistical data for the study. Its main goal was to investigate how the nation's family spending habits and monetary policy instruments relate.

The dependent variable in this study was household consumption spending. In contrast, the independent variables in the model were the broad money supply, exchange rate, interest rate, and monetary policy rate for the specified period. The chapter was split into two sections, pre-estimation and post-estimation, to guarantee the validity of the findings.

Descriptive Statistics

	BMS2	EXCHR	HCE	INT	MPR
Mean	5899.498	95.55810	1.24E+11	11.63723	13.08611
Median	878.4573	101.7000	3.53E+10	9.980000	13.50000
Maximum	34251.70	362.0000	4.15E+11	23.99000	26.00000
Minimum	14.47117	0.618000	1.30E+10	4.704871	6.000000
Std. Dev.	8775.796	96.49305	1.34E+11	4.922208	3.769422
Skewness	1.537563	0.961162	0.923546	0.982665	0.814508
Kurtosis	4.506214	3.351339	2.280531	3.253233	5.127342
Jarque-Bera	19.05325	6.205498	6.385244	6.380811	11.66633
Probability	0.000073	0.044926	0.041064	0.041155	0.002929
Sum	230080.4	3726.766	4.82E+12	453.8520	510.3581
Sum Sq. Dev.	2.93E+09	353814.5	6.82E+23	920.6689	539.9245
Observations	39	39	39	39	39

Source: E-views 9

The statistical characteristics of the variables analyzed in the empirical investigation are collectively presented above. This includes measures like the statistical data's mean, mode, median, maximum, and minimum values. Throughout the research period, the Jarque-Bera statistics values and their associated probability levels shed light on the underlying distribution patterns of the variables used in the regression analysis. Empirical and visual evidence strongly supports the assertion that the statistical properties of the broad money supply in the model adhere to a normal distribution for the entire study duration. This is evident from the probability value of 0.000073%. Similarly, the exchange rate data exhibit a normal distribution pattern over the study period, with a probability value of 0.044926%.

As for household consumption expenditure, which serves as the dependent variable in this study, the data indicate a statistically significant adherence to a normal distribution pattern, as indicated by the probability value of 0.041%. The interest rate variable also showcases a normal distribution throughout the study period at a 0.041% significance level, further affirming the normal distribution pattern in the regression model. Furthermore, the monetary policy rate (MPR), which signifies the rate at which the country's central or apex bank lends to commercial banks in Nigeria, demonstrates a normal distribution pattern with a probability value of 0.00029%.

Unit Root (Augmented dickey and fuller test criterion)

Augmented Dickey Fuller's test criterion was used to assess the presence of unit roots in the statistical properties of individual variables in the model for the period of this investigation.

Variable	**ADF Stat @Level Form**	Critical Values @ 5%	**ADF Stat @First Difference Form**	Critical Values @ 5%	**ADF Stat @Second Difference Form**	Critical Values @ 5%	**Prob****	**Order of Integration**
BMS2	7.556034	-1.952910	3.469587	-1.953381	-7.867160	-3.587527	0.0000	1(2)
EXCHR	4.231067	-1.949856	-4.803603	-3.536601	********	*******	0.0023	1(1)
HCE	-5.253906	-3.568379	********	********	********	*******	0.0010	1(0)
INT	-0.718215	-1.949856	-5.320362	-3.540328	********	*******	0.0006	1(1)
MRP	-3.439774	-2.941145	********	********	********	*******	0.0156	1(0)

Source: E-views 9

The reliability of each variable in the model was assessed using a unit root test for stationarity, which looked for unit roots in each variable's statistical features during the study. The findings offer statistical proof that, only after taking the second difference with a deterministic trend and intercept in the equation line was the broad money supply (BMS2) coefficient steady for the duration. The fact that our trace statistics are greater than the critical values at the 0.05% level of significance and the statistically significant probability values of 0.00000% confirm this. At the initial difference, the exchange rate became stationary with probability values of 0.0023% and no unit root.

With acceptable probability values of 0.0010%, household consumption spending over the study period showed positive probability values, suggesting the lack of a unit root at the level. With probability values of 0.0006%, interest rates became stationary after the first difference was applied in the regression line. Corresponding to this, probability values of 0.0156% support that the coefficient for the monetary policy rate throughout the period similarly attained statistical stationarity at the level. As a result, we evaluate the links between the variables employed in the analysis.

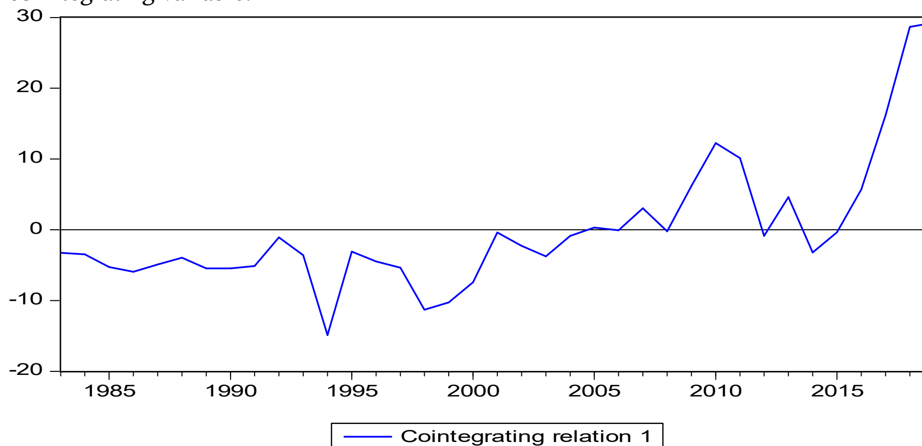
Co-integration Test (Johansen Test Criterion)

We assessed Johansen co-integration to verify whether the variables have a long or short-run relationship, as economically short-run assessment is desirable for economic predictability in the foreseeable time frame.

Unrestricted Co-integration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical. V	Prob.**
None *	0.675208	85.89245	69.81889	0.0015
At most 1	0.564413	44.28333	47.85613	0.1042
At most 2	0.212394	13.53410	29.79707	0.8657
At most 3	0.114430	4.700071	15.49471	0.8398
At most 4	0.005490	0.203695	3.841466	0.6518

Trace statistics indicate 1 cointegrating Equation.

The outcome of the Johansen test, which assesses long-term relationships in the model estimation, indicates a long-term connection among the variables in the regression. This is evident from the trace statistics value of 85.89245, which exceeds the critical value of 47.85613 and is supported by a corresponding probability value of 0.0015%. As a result, we reject the null hypothesis that there is no co-integration among the variables. To gain further insights, we will now examine the graphical trends of the co-integrating variable.



The above visual evidence on the association ship between the two co-integrating equations in the regression line provides evidence of the trend association ship between the two trend lines. It is proven that the trend lines crossed each other on a series of occasions, as shown in the above diagram, which validates the assertion of a co-integrating long-run relationship among the variables in the model estimate for the period of this investigation.

Error Correction Estimate (ECM Criterion)

The error correction model is used to ascertain the speed of adjustment back to the short run in case of a long-run relationship among the series.

	Coefficient	Std. Error	t-Statistic	Prob.
ECM (-1)	-0.262990	0.127534	-2.06211	0.0384

The value of the error correction coefficient is negative, which is desirable. The system provides that in the event of long-run disequilibrium, the speed of adjustment back to short is 26.29% per annum. It, therefore, implies that the system self-adjusts back to short-run 26.29% times per annum back to short-run equilibrium.

Monetary policy and household consumption expenditure (Ordinary et al.)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.123713	0.740542	2.867783	0.0085
BMS2	5.195305	2.467606	2.105403	0.0459
EXCHR	-4.189645	2.240550	-1.869918	0.0737
INT	-0.708906	0.648723	-1.092771	0.2853
MPR	-4.138651	1.382411	-2.993792	0.0958

R-squared 0.855910, Adjusted R-squared 0.838958F-statistic 50.49082Prob(F-statistic) 0.000

The regression line equation is thus defined;

HCE = 5.1953BMS2 –4.1896EXCHR – 0.709INT – 4.1386MPR

In the regression model, household consumption expenditure was the dependent variable, while exchange rate, interest rate, monetary policy rate, and broad money supply were regressors. The results indicate the regressors' positive and statistically significant impact on household consumption expenditure, implying that these variables explain about 85.59% changes in household consumption expenditure. Broad money supply has a positive and significant effect on household consumption expenditure, with a unit increase resulting in a 5.19% increase. This finding aligns with Ufoeze *et al*. (2018), who also observed a positive impact of money supply on consumption expenditure in Nigeria.

On the other hand, the exchange rate has a negative relationship with consumption expenditure, indicating that an increase in the naira's value relative to the dollar leads to a decrease in household spending habits in Nigeria. A unit increase in the exchange rate reflects a -4.18 % decrease in household consumption expenditure. The interest rate was found to have a negative relationship with household consumption expenditure, suggesting that a one per cent increase in interest rates corresponds to a 70.8% decrease in consumption.

CONCLUSION AND RECOMMENDATION

Several important conclusions have been drawn from the study's findings. The statistical examination of the variables included in the regression model revealed that, either at their initial difference or after taking the second difference, they often follow normal distribution patterns and show stationarity. These results offer a strong basis for the recommendations and conclusions that follow. First, the study verified that household consumption spending in Nigeria is positively and statistically significantly correlated with the country's wide money supply. It was discovered that a significant rise in the broad money supply led to an increase in family consumption. This result confirms the significance of the money supply in promoting economic growth and is consistent with earlier findings.

Second, there was a negative correlation between the nation's consumption expenditures and the exchange rate. Consumption spending decreased as the value of the naira vs the dollar increased. This implies that maintaining exchange rates is essential to promoting Nigerian growth. Thirdly, the study found a negative correlation between household consumption spending and interest rates. A corresponding decline in household consumption was linked to a rise in interest rates. This emphasizes how important it is for monetary policy to maintain a balance between promoting consumer expenditure and containing inflation.

We therefore recommend that:

Monetary Policy Management: Given the positive relationship between broad money supply and household consumption, it is recommended that the central bank continues to monitor and manage money supply effectively to support economic growth. This should be done while ensuring that inflation remains within acceptable limits.

Exchange Rate Stability: Policymakers should focus on maintaining exchange rate stability. A stable exchange rate environment is essential to attract and sustain investments in Nigeria. Measures should be taken to minimize currency volatility.

Interest Rate Control: Efforts should be made to manage interest rates prudently. Striking a balance between controlling inflation and keeping interest rates conducive to borrowing and spending is crucial for sustaining consumer demand and economic growth.

Further Research: This study highlighted the complexities of economic relationships in Nigeria. Future research could delve deeper into specific aspects of these relationships, such as the impact of money supply on different sectors of the economy and the interplay between exchange rates and foreign investments.

In summary, the findings of this research underscore the importance of sound monetary policy and exchange rate management in sustaining economic growth in Nigeria. A prudent approach to interest rate control is also crucial to promote consumer spending. These recommendations, if implemented, can contribute to a more resilient and prosperous Nigerian economy.

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EFFECT OF CORPORATE SOCIAL RESPONSIBILITY RESPONSIBILITY COST ON FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Onoche, Sarah-Joy E., Azubuike, Joseph U. B. and Nwaorgu, Innocent A.
Michael Okpara University of Agriculture, Umudike
Correspondence author: sarah.edibo@gmail.com

ABSTRACT
The study examined the effect of corporate social responsibility cost on the financial performance of listed deposit money banks in Nigeria. It adopted an ex-post facto research design. The study spanned ten years (2013-2022). Corporate social reporting (CSR) was proxied by environmental, community development, and health and safety costs. In contrast, the dependent variable financial performance was proxied by Return on Investment (ROI), return on assets (ROA), and return on Equity (ROE). The study population consists of all 14 deposit money banks listed on the Nigerian Stock Exchange as of December 2022, with a sample of 5 banks. Secondary data were sourced from the audited annual reports of the sampled firms. Robust Fixed effect regression was used for the analysis, and a multivariate analysis was performed using Stata 13 to test for the hypothesis. The study found that all financial performance variables (ROI, ROA, and ROE) jointly positively and significantly affect the CSR of listed banks in Nigeria. However, the individual parameters have mixed effects on financial performance. The R-squared revealed a value of 0.577, indicating that CSR variables can explain the variations to 57.7%. In comparison, the remaining 42.29% percentage is explained by other factors not captured in the model. The study concludes that CSR has a positive and significant effect on the financial performance of listed banks, and therefore recommends that the government should provide rebates for companies that incurred CSR costs as a way of encouraging good corporate reportage in addition to a policy framework that should be designed for corporate social responsibilities in Nigeria by the government and to ensure compliance by setting mechanisms and institutions for the implementation of CSR.
Keywords: Corporate social responsibility, Education cost, Return on investments, listed banks, Nigeria.

INTRODUCTION

Companies have recently witnessed a growing awareness of CSR-related issues in a world increasingly obvious by financial scandals. Firms invest in CSR to improve and defend their legitimacy and reputation. However, CSR engagement may sometimes be a disguise of firm misconduct and an instrument of manager entrenchment. Thereby, an ethical judgment of firms relies on CSR engagement on the one hand and on avoiding unethical behavior on the other.

Corporate social responsibility (CSR) activities are those that firms voluntarily carry out, beyond legal requirements, in consideration of the needs of various stakeholders and are long-term resource-allocation activities involving costs (Song, 2022). That shows that whether or not a firm engages in CSR activities is primarily at the discretion of its management, and their enticements for performing CSR activities are replicated in the firm's participation.Corporate social responsibility (CSR) has received less attention in developing countries like Nigeria. CSR, defined in several ways, essentially refers to the demand on business organizations to encompass their relevance beyond profit-making to taking responsibility for the well-being of their environment and stakeholders.

There are five CSR aspects: economic, legal, ethical, philanthropic, and political responsibilities (Ezechukwu & Uzagu, 2022). The perception and practice of CSR in Nigeria have been largely in the aspect of philanthropic responsibilities. Although corporate CSR activities have been widely reported, the impact still needs to be higher. Contributory to the reported low levels of CSR is the fact that the tone of CSR obligations of corporations in Nigeria is still largely voluntary, unlike in some countries like India and China that have made CSR mandatory by law (Ezechukwu *et al.,* 2022).

The growing concern about the environment, and in particular sustainability, has promoted legislation at the national and international levels. In Nigeria, the Environmental Protection Act of 1990 takes the first steps toward a piecemeal implementation of 'the polluter pays' principles through integrated pollution control (Tapang *et al.*, 2021). The Act provides levies on certain categories of companies to fund the regulatory and control bodies to enforce it. Controls are placed on emissions and industrial processes, and there is more public disclosure on the operations of polluting companies. For the accounting function, a legal obligation is imposed to minimize waste production utilizing what is called the "Best Available Technology Not Entailing Excessive Cost" (BATNEEC) principle (Tapang *et al.*, 2021). Accountants have begun to define some ecological issues falling within their range of skills. For example, CIMA (1997) argued that the forward-thinking management accountant should be taking an active role in environmental

management, as he or she has key skills to apply to the process. The basic financial accounting model may impede change as it only records and employs the data that arise from a transaction that generates a price. Prices are only generated when property rights are transferred. Most of the matters concerning ecology are things over which property rights do not exist. As a result, the basic financial accounting model ignores it (Gray, 1995) as cited in (Tapang *et al.*, 2021). Although accountants can play an active and essential role in developing sound environmental and reporting procedures, much work must be done to develop more comprehensive reporting systems involving quantitative and qualitative techniques.

The United Nations Environment Program (UNEP) has been active in directing attention to issues of environmental disclosure. Recommendations have been made for the disclosure of key environmental issues facing firms and plans for addressing them; progress in addressing changes required by future legal requirements; actual and projected levels of environmental expenditure; energy use, materials use, emissions, and waste disposal routes; financial estimates of savings and benefits flowing from pro-environment efforts; and an independent audit statement (Adams, 2000). Despite this and other similar efforts, the preference has been to refrain from regulated reporting.

This situation encourages companies to give low priority to reporting social information generally. The slow response on the part of companies towards heightened public concern over CSR issues is unfortunate because external reports are extremely valuable as a means of promoting public accountability, the need for which is central to the emerging green agenda. The problem is not particular to the UK, as it has been observed across several countries, including Nigeria. Today, the level of demand goes beyond the direct impact of the organization's business and incorporates how corporations can contribute to societal and environmental causes.

CSR has remained a subject of academic and business discussions, and it is seen globally as overbearing for any decent business organization. Although many companies have embraced CSR and made significant strides in this area, several challenges still need to be addressed. One of the biggest challenges businesses face regarding CSR is the need for a clear framework for implementing and measuring CSR initiatives (Ezechukwu *et al*., (2022). Compared to other business activities, such as finance or marketing, there is no established framework for CSR that businesses can follow. This means businesses often have to develop CSR strategies and metrics, which can be time-consuming, challenging, and costly.

Another challenge with CSR is the need for more transparency and accountability, as familiar in the case of Enron Corporation, Tyco International plc, and WorldCom, among others. The high-profile frauds shook investor confidence in the trustworthiness of corporate financial statements. They led many to demand an overhaul of decades-old regulatory standards, which led to establishing the Sarbane-Oxley Act of 2002. For CSR to be effective, companies must be open and honest about their efforts. This means disclosing their environmental and social impacts and the steps they take to address any negative impacts. However, many companies need to be more transparent about their CSR efforts, which can undermine trust and lead to skepticism about their commitment to social and environmental responsibility.

Companies can implement robust CSR management systems that provide detailed information about their CSR activities and impacts to overcome this challenge. They can also engage with stakeholders, such as investors, employees, and customers, to solicit feedback and input on their CSR efforts. Another challenge is balancing short-term economic considerations with implementing sustainable, long-term CSR initiatives. In today's fast-paced business environment, companies are constantly pressured to generate profits and deliver value to shareholders. As a result, many companies may be hesitant to invest in CSR programs that may not provide an immediate financial return.

Several quantitative research studies on CSR in Nigeria have been carried out, with most of the results being the same, but some still need to be mixed. This suggests the need for more research to validate the findings. Besides, most available literature suggests that, while the practice of CSR by corporate organizations in Nigeria is more of a philanthropic aspect, the extent of implementation of CSR in Nigeria is still considered relatively low. Identified challenges to CSR implementation in Nigeria include the failure of governments, lack of an effective CSR enforcement framework, institutionalized or established corruption, and political and social insecurity.

The lack of enforcement and voluntary attitude by which the CSR obligations are presented in the corporate laws of Nigeria have been blamed for the low level of CSR compliance. Hence, authors have advocated for CSR to be made mandatory for corporations in Nigeria (Ihugba, 2012). Improvements can be achieved by compulsory CSR regulation and increasing corporate law enforcement powers. With these in place alongside the increasing trends and effects of globalization, it is hoped that there will be appreciable improvements in CSR impact and research in Nigeria shortly. On this premise, the current study seeks to evaluate the effect of CSR on the financial performance proxied by ROA, ROE and ROI of listed deposit money banks in Nigeria.

Concept of Corporate Social Responsibility (CSR)

Different authorities have explained the CSR concept, but all point to the fact that firmsadvance their value chain and reciprocate with society for the benefits derived from society to sustain long-term stability. CSR is the actions undertaken by firms either voluntarily or in compliance with laws and societal pressures to improve the environment and lives of society and reciprocate with society in the environment where they operate. It is a concept that relates organizational behavior concerning social concerns for the broad society group to build a reputation for future business benefit.

Definition of Independent Variable

Environmental cost

Environmental costs are categories in the areas in which expenditures are made. Investments in education are the expenditures a firm makes in the promotion of education as a way of giving back to society; such funds expended are always stated in the directors' report on the annual reports for a given period as applicable; such investments are in the areas of the building of schools, educational and vocational sponsorships, provision of exercise and textbooks, etc.

Community development cost

These are costs that relate to developing communities and cleaning polluted environments. Community development includes building town halls, road construction, waste management, etc.

Health and safety cost

These are expenditures on hospital equipment, renovation and construction of hospital buildings, provision of medical facilities and drugs, etc., made by companies to society within an accounting period.

Concept of profitability

According to Onyam et al. (2015), profitability means the ability to profit from all the business activities of an organization, company, firm, or enterprise. They further emphasize that profitability presents how a company's management structure can efficiently produce profit by using all the resources available in the company and the market.

Return on Asset (ROA): Return on assets profitability shows the degree to which a firm's revenues exceed its cost. ROA indicates how profitable a company is of its total assets. It shows how efficiently the management uses assets to generate earnings. ROA= Net income / Total asset.

Return on Investment (ROI) usually measures the gain or loss generated on an investment relative to the money invested. It is usually expressed as a percentage and is typically used for financial decisions to compare a company's profitability or the efficiency of different investments. ROI is calculated as (Net Profit/Cost of Investment X100/1).

Return on Equity(ROE): Return on equity ratio measures a firm's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE = earnings after tax scaled/company's capital employed during the year X 100/1.

Theoretical Framework

Agency Theory: This theory was developed by Jensen and Meckling in 1976. They suggested a theory of how a company's governance is based on the conflicts of interest between its owners (shareholders), managers, and major providers of debt finance. Generally, the principal agent theory is the starting point for any corporate governance debate (Mbonu & Amahalu, 2021b). The agency's theory describes the most relevant agency issues in today's institutions, particularly since the separation of ownership and control exists. Modern companies suffer from control and ownership separation, as they are managed by professionals who are not owners. Empirical evidence to explain both the nature of these agency problems and how to settle them has been documented by Jensen and Meckling's (1976) fundamental work through proposing the theory of the firm which is based on conflicts of interest among the stakeholders involved, equity holders, executives, and debt holders.

Stakeholder theory:

Stakeholder theory combines social and organizational theories. Stakeholders are any organization or people who can affect or be influenced by achieving company objectives. Stakeholder theory deals with appropriate stakeholder groups that need managerial attention (Sundaram &Inkpen, 2004). Stakeholder support is essential for a company's existence, and stakeholders can influence how information is published in financial statements. Stakeholder theory is based on balancing stakeholder interests and goes beyond describing or forecasting causality (Donaldson & Preston, 1995). Investors react negatively to stakeholder pressure, regulatory punishments, colleague defection, activist boycotts, and negative media coverage (Tapang et al., 2021).

Empirical Review

Igbekoyi (2022) examined how financial performance determinants influence the CSR financing of listed manufacturing firms in Nigeria. They made use of secondary data obtained from the annual reports of selected quoted manufacturing firms for the period of 2002 to 2019. A sample size of 20 listed manufacturing firms out of 64 manufacturing firms quoted on the Nigerian Stock Exchange as of 31st

December 2018 was selected using the Purposive Sampling Technique. Descriptive statistics and panel data regression analysis were used to analyze the data. Her findings showed that firms' profitability positively and significantly affects CSR financing, while financial indicators like Return on asset and leverage have negative and insignificant effects. The study concluded that the profitability of companies significantly influences their ability to finance CSR. Although Return on asset and leverage has a negative effect, it can be managed. The study, therefore, recommends that companies intensify efforts to increase their profit base to give adequate room for financing CSR massively to harness the benefits that accompany socially responsible companies.

Using descriptive research design, Ekundayo&Ujah (2022) investigated the effect of corporate social responsibility on the financial performance of industrial goods companies listed in the Nigeria Stock Exchange from 2009 to 2018. A purposive sampling technique was applied to the study population of 14 industrial goods firms to determine the sample size of 5 industrial goods firms. Panel data were obtained from the annual report and accounts of the sampled industrial goods firms and analyzed using multiple regression techniques via STATA 12.0 software. The results showed that while C-CSR, ER, SIZE, and LEV have positive effects and AGE and SGRW negatively affect the ROA of listed industrial goods firms in Nigeria, only LEV and SGRW have insignificant impacts. The study concludes that corporate social responsibility plays a significant role in the financial performance of listed industrial goods firms in Nigeria. It is recommended that the management of industrial goods firms adopt CSR because it positively affects the overall financial performance of their business entities. Sharma *et al.* (2021) studied the impact of CSR on the financial performance of companies in India's manufacturing and service sectors. The study sampled selected companies in both sectors using a purposive sampling method. Data used for the study were for the period between 2008 and 2017. A correlation technique was used to examine the relationship between CSR score and the financial parameters. The study found a significant link between CSR score and financial performance (proxied by ROE, ROA, and ROCE). The findings also showed that the Return on Equity, return on capital employed, and Return on assets had inverse relationships with the CSR Score of companies in the Manufacturing Sector. In contrast, Return on Equity had a positive association with the CSR Score of companies operating in India's service sector. Hence, the study concluded that a non-significant relationship existed between CSR and the performance of firms in India's manufacturing sector. Lyu *et al*. (2021) assessed the effect of corporate social responsibility (CSR) on financial performance in the hospitality industry in China. The study employed quantitative and qualitative content analysis methods and was anchored on the stakeholder theory. The review showed that most studies agreed a positive correlation exists between CSR and financial performance. The study review also showed negative associations between CSR and the performance of sample companies making losses. Practically, the review results also provide evidence that hospitality companies should improve their corporate social responsibility practices. Tapang *et al*. (2022) examined how corporate social responsibility mediates the link between corporate governance and financial performance. An ex-post facto research design was employed, and data obtained from secondary sources were analyzed using the partial least square techniques. The structural equation modeling approach was adopted, and the results revealed that corporate social responsibility has an insignificant effect on corporate governance. It also revealed that corporate social responsibility significantly affects financial performance. Additionally, the results showed that corporate governance significantly affects financial performance.

Furthermore, the research found that corporate social responsibility does not mediate the relationship between corporate governance and financial performance. Conclusively, the study suggests that corporate social responsibility does not mediate the link between corporate governance and financial performance. Therefore, the study suggests that a unified corporate organization is established to collect and compile corporate governance-related data and develop relevant indices to aid corporate governance investigation in Nigeria.

Niresh and Silva (2018) studied the nexus between corporate social responsibility disclosure and financial performance: evidence from the listed banks, finance, and insurance companies in Sri Lanka. Corporate social responsibility was measured using philanthropic and ethical costs, while performance was measured using net profit margin, ROA, and ROE. Secondary data was utilized forthe study, and the observed data consists of six years from 2010 to 2015. Information concerning CSR was obtained from the companies' annual reports from 2010 to 2014, and the data regarding companies' financial performance was collected from 2011 to 2015. Two multiple regression models were analyzed using Stata. The study's findings revealed a significant association between Corporate Social Responsibility Disclosure and the future financial performance of the selected listed banks, finance, and insurance companies in Sri Lanka. The study recommends that the regulating bodies of corporates in Sri Lanka, for example, the Colombo Stock Exchange (CSE), the Ceylon Chamber of Commerce (CCC), and the Securities and Exchange Commission, encourage companies to adopt sustainability principles in their core business operations.

METHODOLOGY

The study population comprises fourteen deposit money banks (14) listed in the Nigerian Stock Exchange as of December 2022. Based on stratified sampling criteria, the sample size of five (5) deposit money banks: Guarantee Trust Bank, Zenith, Access, Fidelity, and WEMA Bank were selected. The five banks represent 36% of the total population, which is good enough to make an inference. Data were collected from annual reports of banks under study. The annual reports for 2013-2022 were used due to increased awareness and stakeholder pressure within those periods.

The independent variable is corporate social responsibility cost, which is proxied by environmental cost (ENC), which is a measure of education cost, community development cost (CDC), and health and safety cost (HSC) on the hand. The dependent variable, financial performance, is measured by the Return on Investment (ROI), return on asset (ROA), and return on Equity (ROE) of listed deposit money banks.

The model is thus specified as follows:

ROI= bo +bLENCit+b2LCDCit + b3LHSCit + ei……………………i

ROA= bo +bLENCit+b2LCDCit + b3LHSCit + ei……………………ii

ROE= bo +bLENCit+b2LCDCit + b3LHSCit + ei……………………iii

β1-b3= Parameters to be estimated

LENC = Log of Environmental Cost

LCDC= Log of Community Development Cost

LHSC= log of Health and Safety Cost

et= stochastic or error term.

RESULTS AND DISSCUSSIONS

Test for symmetry and normality

The descriptive statistics were estimated to identify statistics of mean, median, maximum, minimum, standard deviation, skewness, kurtosis, and Jarque-Bera of the dataset. These aided in testing for the normality of each outlay of the dataset to describe the dataset efficiently and statistically.

Table 1: Descriptive statistics of the variables

	LENS	LCDC	LHSC	ROI	ROA	ROE
Mean	8.095333	0.757000	0.816000	0.162400	0.058300	0.267667
Median	7.945000	0.760000	0.870000	0.180000	0.060000	0.340000
Maximum	16.65000	1.410000	0.940000	0.380000	0.090000	0.650000
Minimum	2.490000	0.050000	0.050000	-0.120000	0.030000	0.030000
Std. Dev.	3.598316	0.236966	0.172339	0.104415	0.014591	0.180892
Skewness	0.452833	-0.329382	-3.241492	-0.423091	0.016882	-0.216259
Kurtosis	2.376527	5.402862	14.37253	3.422353	2.662382	1.884932
Jarque-Bera	1.511188	7.759647	214.2043	1.118007	0.143907	1.788060
Probability	0.469734	0.020654	0.000000	0.571779	0.930574	0.409004
Sum	242.8600	22.71000	24.48000	4.872000	1.749000	8.030000
Sum Sq. Dev.	375.4885	1.628430	0.861320	0.316171	0.006174	0.948937
Observations	50	50	50	50	50	50

Source: Authors computation, 2023

Many statistical inferences require that a data series be normal or near normal. From Table 2, three tools are necessary to determine the symmetry and normality of the data series used in this study. The tools are skewness, kurtosis, and Jarque-Bera tests. Whereas skewness is a measure of symmetry (balance) of distribution around the mean, kurtosis is a measure of the flatness of the distribution; according to Brown (1997), the acceptance range for skewness is -8 to +8, while the accepted range for kurtosis is between -3 to + 3.

Regarding skewness, the table result showed that all the variables fall within the acceptance region, and all the data in the series are symmetrical and tend towards normality. Although not all the variables for kurtosis fall within the acceptance region, as Brown (1997) proposed, not all variables tend toward normality. Jarque-Bera test measures whether a data set has the skewness and kurtosis to allow for normality. The JarqueBera analysis at 5% level of significance showed ENC (P-value 0.469 > 0.05); CDC (P-value 0.021 < 0.05); HSC (P-value 0.000 < 0.05); ROI (P- value 0.572 > 0.05); ROA (0.931 > 0.05), ROE (0.409 > 0.05). From the result, the CDC and HSC satisfy the test condition for the normality of the

data distributed. At the same time, ENC, ROI, ROA, and ROE violate or fail to satisfy the test for normality.

Panel data estimation model

Panel Data Estimation model was employed. Panel data give more informative data, variability, less collinearity among variables, more degrees of freedom, and more efficiency (Baltagi, 1995). Thus, panel data can minimize biases by categorizing individual firms into broad categories. In the panel estimation test, the Hausman test determines the appropriate model to use, either the fixed effect model or the random effect model. Two hypotheses are tested in running the Hausman test: (i) Ho: Random effect model is appropriate (ii) Hi: Fixed effect model is appropriate. The appropriate model is selected using the p-value judgment at a 5% significant level. Where hausman probability test statistics is less than 0.05, reject the null hypothesis, and where hausman probability test statistics is greater than 0.05, accept the null hypothesis.

$\alpha = 0.05$

Hausman statistics < 0.05 = reject Ho hypothesis (use fixed effect model effect)

Hausman statistics > 0.05 = reject Hi hypothesis (use Random effect model)

After conducting the Hausman test, the results are a fixed effect model as appropriate. Below is the summary of the results from the Hausman test.

Panel regression model on CSR and ROI

To test that:

Ho: b1=b2=b3 =0 (All slope coefficients are equal to zero)

H1: b1≠b2≠b3≠0 (all slope coefficients are not equal to zero)

In testing the first hypothesis as specified in the model on CSR cost and Return on Investment are as shown below:

Table 2 panel regression analysis for ROI

	ROI Model Fixed Effect	**ROI Model Random effect**
C	3.39	2.21
LENS	2.23 (0.035)	4.95 (0.000)
LCDC	0.72 (0.481)	0.10 (0.920)
LHSC	-2.87 (0.008)	-2.00(0.046)
F-statistics	4.56 (0.012)	27.42 (0.000)
R-squared	36.3	30.43
HAUSMAN TEST		**prob>chi2=0.00**

Regarding the result in Table 2 above, ENC has a calculated t-statistics of 2.23 with a probability value of 0.035, which shows that the null hypothesis is rejected and the alternative accepted. The implication of this on ENC is that the fixed effect model best fits the model. This means that Environmental cost has a significant influence on Return on Investment. CDC has a calculated t-statistics of 0.72 with a probability value of 0.481, showing that the null hypothesis is accepted and the alternative rejected. This means the CDC does not significantly influence shareholders' Return on Investment.

On the other hand, HSC has a negative t-statistic of -2.87 with a probability of 0.008, which shows that HSC has a negative but significant effect on shareholders' investment at a 5% significance level. Hence, the null hypothesis is rejected, and the alternative is accepted. This indicates that HSC has a significant effect on Return on Investment. Thus, we should adopt the fixed effect model as it is suitable for drawing our conclusion.

The F-statistics value of 4.56(0.012) and 27.42(0.000) for the fixed and random effect models, respectively, shows that both models are valid for drawing inference since they are statistically significant at 5%. In the case of the coefficient of determination (R-squared), it was observed that 36.39% of systematic variations in ROI were explained jointly by the independent variables in the fixed and random effect models, respectively.

Decision:

The two widely used panel data regression estimation techniques (fixed and random effect) were adopted to test for the model's cause-effect relationship between the dependent and independent variables. The table above presents the results of the two-panel data estimation techniques, which reviewed the differences in the magnitude of the coefficients, signs, and the number of insufficient variables. The fixed effect panel regression estimation was based on the assumption of no correlation between the error term and the explanatory variables. In selecting from the two-panel regression estimation results, the Hausman test was conducted, and the test is based on the null hypothesis that the random effect model is preferred to

the fixed effect model. A look at the p-value of the Hausman test (0.000) implies that we should reject the null hypothesis and accept the alternative hypothesis at a 5% significance level. This implies that we should adopt the fixed effect panel regression results in drawing our conclusion and recommendation. Also, fixed effect results tend to be more appealing statistically when compared to the random effect.

Panel regression model on CSR and ROA

To test that:

Ho: b1=b2=b3 =0 (All slope coefficients are equal to zero)

H1: b1≠b2≠b3≠0 (all slope coefficients are not equal to zero)

In testing the second hypothesis as specified in the model on CSR cost and ROA are as shown below:

Table 3 panel regression analysis for ROA

	ROA Model Fixed Effect	**ROA Model Random effect**
C	4.42	2.55
LENS	-1.36 (0.187)	1.47 (0.140)
LCDC	1.73 (0.097)	0.17 (0.862)
LHSC	-0.33 (0.744)	0.83 (0.405)
F-statistics	1.27 (0.3061)	9.79 (0.0204)
R-squared	13.7	0.06
HAUSMAN TEST		**prob>chi2=0.0039**

Based on the result in Table 3 above, the slope coefficient of -0.016 for ENC is the change in the average effect of Return on Assets per unit change in ENC holding the values of CDC and HSC in the model constant. The variable has a t statistic of -1.36 and a probability of 0.187. This implies that ENC on the fixed effect model is negative and insignificant. In the random effect model, ENC has a positive t-status but is still insignificant at the 5% level. This implies that ENC has a positive but insignificant relationship with banks' ROAs.

Meanwhile, the slope coefficient of 0.0026 for CDC is the change in the average effect of ROA per unit change in CDC, holding the values of ENC and HSC in the model constant. The variable has a t-statistic of 0.17 and a probability of 0.864. This implies that the CDC has a positive but insignificant relationship with the ROA of the banks. On the other hand, the slope coefficient of 0.0183 for HSC is the change in the average effect of ROA per unit change in HSC, holding the values of CDC and ENC in the model constant. The variables have a t stat of -0.33 and its associated p-value of 0.3061 for the fixed effect and a t statistic of 0.83 and probability of 0.405 for the random effect. This implies that HSC has a negative and insignificant effect at a 5% level of significance on the ROA of banks.

The F-statistics value of 1.27(0.3061) and 9.79(0.0204) for the fixed and random effect models, respectively, shows that the random effect model is valid for drawing inference since it is statistically significant at 5%. In the case of the coefficient of determination (R-squared), it was observed that 13.7% and 0.063% systematic variations in ROA were explained jointly by the independent variables in the fixed and random effect models, respectively.

Decision:

The two widely used panel data regression estimation techniques (fixed and random effect) were adopted to test for the model's cause-effect relationship between the dependent and independent variables. The table above presents the results of the two-panel data estimation techniques, which reviewed the differences in the magnitude of the coefficients, signs, and the number of insufficient variables. The fixed effect panel regression estimation was based on the assumption of no correlation between the error term and the explanatory variables. In selecting from the two-panel regression estimation results, the Hausman test was conducted, and the test is based on the null hypothesis that the random effect model is preferred to the fixed effect model. A look at the p-value of the Hausman test (0.0039) implies that we should reject the null hypothesis and accept the alternative hypothesis at a 5% significance level. This implies that we should adopt the fixed effect panel regression results in drawing our conclusion and recommendation. Also, it implies that fixed effect results are more appealing statistically when compared to the random effect.

Panel regression model on CSR and ROE

To test that:

Ho: b1=b2=b3 =0 (All slope coefficients are equal to zero)

H1: b1≠b2≠b3≠0 (all slope coefficients are not equal to zero)

In testing the third hypothesis as specified in the model on CSR cost and ROE are as shown bel

Table 4 Panel regression analysis for ROE

	ROE Model Fixed Effect	ROE Model Random effect
C	4.00	-1.13
LENS	0.70 (0.492)	3.70(0.000)
LCDC	3.66 (0.001)	0.60 (0.549)
LHSC	-2.52 (0.019)	0.45(0.654)
F-statistics	7.84(0.0008)	35.48 (0.000)
R-squared	49.5	24.72
HAUSMAN TEST		**prob>chi2=0.000**

From the result in Table 4 above, the slope coefficient of 0.0037 for ENC is the change in the average effect of ROE per unit change in ENC, holding the values of CDC and HSC in the model constant. The variable has a t statistic of 0.70 and a probability of 0.492, which implies that ENC on the fixed effect model is positive and insignificant. On the random effect model, ENC has a positive t-stat of 3.70 with a p-value of 0.0000, significant at a 5% level. This implies that ENCs have a positive and significant relationship with banks' ROEs. The slope coefficient of 0.2548 for CDC is a change in the average effect of ROE per unit change in CDC, holding the values of ENC and HSC in the model constant. The variable has a t statistic of 3.66 with its associated p-value of 0.001 for a fixed effect and a t stat of 0.60 with a p-value of 0.549 for a random effect. This implies that CDC has a positive and significant relationship at a 5% level of significance with the ROE of the banks.

On the other hand, the slope coefficient of 0.233 and 0.093 for HSC for both fixed and random effects, respectively, is the change in the average effect of ROE per unit change in HSC, holding the values of CDC and ENC in the model constant. The variables have a t statistic of -2.52, a probability of 0.019 for a fixed effect, and a t stat of 0.45 with its associated p-value of 0.654 for a random effect. This implies that HSC has a positive and significant effect at a 5% significance level on the ROE of listed deposit money banks in Nigeria.

The F-statistics value of 7.84(0.008) and 35.48(0.000) for the fixed and random effect models, respectively, shows that the random effect model is valid for drawing inference since it is statistically significant at 5%. In the case of the coefficient of determination (R-squared), it was observed that 49.5% and 24.72% systematic variations in ROE were explained jointly by the independent variables in the fixed and random effect models, respectively.

Decision:

The two widely used panel data regression estimation techniques (fixed and random effect) were adopted to test for the model's cause-effect relationship between the dependent and independent variables. The table above presents the results of the two-panel data estimation techniques, which reviewed the differences in the magnitude of the coefficients, signs, and the number of insufficient variables. The fixed effect panel regression estimation was based on the assumption of no correlation between the error term and the explanatory variables. In selecting from the two-panel regression estimation results, the Hausman test was conducted, and the test is based on the null hypothesis that the random effect model is preferred to the fixed effect model. A look at the p-value of the Hausman test (0.000) implies that we should reject the null hypothesis and accept the alternative hypothesis at a 5% significance level. This implies that we should adopt the fixed effect panel regression results in drawing our conclusion and recommendation. Also, it implies that fixed effect results are more appealing statistically when compared to the random effect.

Test of Hypotheses

In this study, three hypotheses were stated and tested which are:

H_{o1}: Corporate social responsibility (ENC, CDC, HSC) costs do not significantly affect the Return on investment of listed deposit money banks in Nigeria.

H_{o2} Corporate social responsibility (ENC, CDC, HSC) cost does not significantly affect the Return on assets of listed commercial banks in Nigeria

H_{o3}: There is no significant effect between Corporate social responsibility (ENC, CDC, HSC) cost and Return on Equity.

Table 5 Multivariate regression results

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Equation	Obs	Parms	RMSE	R-sq	F	P
roi	50	4	.076926	0.5134	9.142961	0.0003
roa	50	4	.0131346	0.2735	3.263154	0.0374
roe	50	4	.1242358	0.5771	11.82713	0.0000

	Coef	Std. Err.	t	P>|t|	[95% Conf.	Interval]
roi						
lenc	.026003	.0052509	4.95	0.000	.0152097	.0367963
lcdc	.0089443	.0894604	0.10	0.921	-.1749442	.1928328
lhsc	-.2578909	.1290105	-2.00	0.056	-.5230758	.0072941
_cons	.1555651	.0703789	2.21	0.036	.0108991	.3002311
roa						
lens	.0013224	.0008965	1.47	0.152	-.0005205	.0031652
lcdc	.0026503	.0152747	0.17	0.864	-.0287473	.034048
lhsc	.0183263	.0220277	0.83	0.413	-.0269522	.0636048
_cons	.0306346	.0120167	2.55	0.017	.0059338	.0553353
roe						
lenc	.0313922	.0084802	3.70	0.001	.013961	.0488235
lcdc	.0865438	.1444789	0.60	0.554	-.2104369	.3835244
lhsc	.0933673	.2083526	0.45	0.658	-.3349075	.5216422
_cons	-.1281653	.1136623	-1.13	0.270	-.3618015	.1054709

Source: Stata 13

Interpretation of Results

Table 5 above shows a multivariate regression result of how the dependent variables affect the independent variables jointly and individually.

The regression result showed that the estimated coefficients of the regression parameters all have a positive effect and conform to our a- priori expectations. The sign implies that the dependent variables ROI, ROA, and ROE are positively affected by the three coefficients of CSR (ENC, CDC, HSC). The coefficient of determination R^2 of 0.5134, 0.2735, and 0.5771 for ROI. ROA and ROE respectively implied that 51.34%,27.35%, and 57.71% of the sampled variations are caused by the dependent variables are explained or caused by the explanatory variable. In comparison, the remaining 48.66%, 72.65%, and 42.29%, respectively, are unexplained or caused by variables not built into this model. The F statistics were also used to determine the overall significance/fitness of the model. The F-values of 9.14, 3.26, and 11,83 for ROI, ROA, and ROE, respectively, are indications that the model is statistically significant at 5 levels of significance at a degree of freedom fd1=3 and df2 = 26.

The individual effect of the model is explained below

Test of hypothesis one

Effect of CSR Costs on Return on Investment

R	=.0769
R-Square	=.5134
Adjusted R-Square	=.4576
F- Statistic (df3, 46)	=9.1430 (.0003)

Source: Researcher's Estimation, 2023

Regression results on the effect of non-disclosure of CSR cost on Return on Investment.

The result in the table above showed multiple regression results between corporate social responsibility costs (ENC, CDC, and HSC) and return on InvestInvestmentregression results showed that the estimated coefficient of the regression parameter has a positive sign and thus conforms to the a-priori expectation. This sign implies that the dependent variable, Return on Investment (ROI), is positively affected by the three components of CSR (ENC, CDC, and HSC). The coefficient of determination R-squared of 0.5134 implied that 51% of the sample variation in the dependent variable Return on Investment (ROI) is explained or caused by the explanatory variable. In comparison, the remaining 48.16% is unexplained. This remaining 48.16% could be caused by other factors or variables not built into the model. The fairly

high value of R square indicates a good relationship between the dependent variable Return on Investment (ROI) and ENC, CDC, and HSC jointly. The value of the adjusted R2 is 0.4576, which shows that the regression line, which captures 45.76 percent of the total variation in Return on Investment (ROI), is caused by variation in the explanatory variable specified in the model, with 54.24 percent accounting for the stochastic error term. The F-statistic was also used to determine the overall significance of the model. The F-value of 9.14296 with a PV of 0.0003 on the combined three components indicates that the model is statistically significant at a 5 percent level of significance at the degree of freedom fd1=1 and df2=26.

Decision

Concerning the result above, the f value of 9.142 with its associated probability value of 0.0003 showed that the null hypothesis is rejected and the alternative accepted. This means that corporate social responsibility cost significantly influences Return on Investment.

Test of hypothesis two

Effect of corporate social responsibility costs on Return on assets

R	=.01313
R-Square	=.2735
Adjusted R-Square	=.1897
F- Statistic (df3, 46)	= 3.2632(.0374)

Source:Researcher's Estimation, 2023

Regression results on the effect of corporate social responsibility cost disclosure on Return on assets.

The result above showed multivariate regression results between CSR costs (ENC, CDC, and HSC) and return on assets. The regression results showed that the estimated coefficient of the regression parameter has a positive sign and thus conforms to the a-priori expectation. This sign implies that the dependent variable, Return on Assets (ROA), is positively affected by the three components of CSR. The coefficient of determination R-squared of 0.2735 implied that 27.35% of the sample variation in the dependent variable Return on Assets (ROA) is explained or caused by the explanatory variable. In comparison, the remaining 72.65% is unexplained. This remaining 72.65% could be caused by other factors or variables not built into the model. The fairly low value of R square indicates a low relationship between the dependent variable Return on Assets (ROA) and ENC, CDC, and HSC jointly. The value of the adjusted R2 is 0.1897, which shows that the regression line, which captures 18.97 percent of the total variation in Return on assets (ROA), is caused by variation in the explanatory variable specified in the model with 81.13 percent accounting for the stochastic error term. The F-statistic was also used to determine the overall significance of the model. The F-value of 3.26 with a PV of 0.0374 on the combined three components indicates that the model is statistically significant at a 5 percent significance level at the degree of freedom fd1=1 and df2=46.

Decision

Concerning the result above, the f value of 3.263 with its associated probability value of 0.0374 showed that the null hypothesis is rejected and the alternative accepted. This means that corporate social responsibility cost significantly influences Return on Assets.

Test of Hypothesis Three

Effect of Corporate Social Responsibility Costs on Return on Equity

R	=.1242
R-Square	=.5771
Adjusted R-Square	=.5283
F- Statistic (df3, 26)	=11.8271 (.0000)
ENC	=3.70 (0.001)
CDC	=0.06 (0.554)
HSC	=0.45(0.658)

Source: Researcher's Estimation, 2023

Regression results on the effect of CSR cost disclosure on Return on Equity.

The table above showed multivariate regression results between corporate social responsibility costs (ENC, CDC, HSC) and return on Equity. The regression results showed that the estimated coefficient of the regression parameter has a positive sign and conforms to the a-priori expectation. This sign implies that the dependent variable, Return on Equity (ROE), is positively affected by the three components of corporate social responsibility cost. The coefficient of determination R-squared of 0.5771 implied that 57.71% of the sample variation in the dependent variable Return on Equity (ROE) is explained or caused by the explanatory variable. In comparison, the remaining 42.29% is unexplained. This remaining 42.29% could be caused by other factors or variables not built into the model. The fairly high value of R square indicates a good relationship between the dependent variable Return on Equity (ROE) and ENC, CDC, and HSC jointly. The value of the adjusted R2 is 0.5282, which shows that the regression line, which captures 52.82 percent of the total variation in Return on Equity (ROE), is caused by variation in the

explanatory variable specified in the model with 47.18 percent accounting for the stochastic error term. The F-statistic was also used to determine the overall fitness of the model. The F-value of 11.8271 with a PV of 0.0000 on the combined three components indicates that the model is statistically significant at a 5 percent level of significance at the degree of freedom fd1=3 and df2 =26.

Decision

Concerning the result above, the f value of 11.8271 with its associated probability value of 0.0000 showed that the null hypothesis is rejected and the alternative accepted. This means that corporate social responsibility cost significantly influences Return on Equity.

Discussion of Findings

The findings emanating from the study are discussed under the study's main objective, which sought to investigate the effect of non-disclosures of corporate social responsibility costs on the financial performance of listed deposit money banks in Nigeria. The firm's financial performance was evaluated in the study as indices were (ROI, ROA, and ROE) about the three components of corporate social responsibility, which included environmental cost (ENC), community development cost (CDC), and health and safety cost.

The result analyzed above revealed that financial performance significantly determines corporate social responsibility costs disclosure among listed deposit money banks in Nigeria. However, the direction of such an effect differed among the various components. The effect of the financial performance indices on the different corporate social responsibility components is presented below.

Return on Investment (ROI) and corporate social responsibility costs

As shown in Table 5, the result reveals that the effect of shareholders' Return invested on corporate social responsibility cost for listed deposit money banks in Nigeria, as used in the study, differed among the various components of CSR. ENC, which recorded, on average, the best result, as displayed in Table 3, showed a positive and significant relationship. (Consistent with Ekundayo and Ujah, 2022, Igbekoyi, 2022) While a positive relationship was reported for CDC but was insignificant at a 5% significance, HSC, on the other hand, reported a negative and insignificant relationship. (consistent with Lyu *et al*., 2021). The implication is that the banking sector will be willing to disclose more information on CSR as they become more familiar with CSR disclosure issues. Environmental cost recorded the best result from the components investigated, as shown above in the regression values; the result may be connected to the fact that firms strive to maintain environmentally friendly relationships via InvestInvestmentucation in favor of the society in which they operate. Regrettably, the negative insignificant relationship in HSC is not representative of the measure of reporting it is subjected to. Hence, regulatory bodies require more work to enhance CSR disclosure.

Return on Assets (ROA) and corporate social responsibility costs

In this study, ROA measures how profitable a firm is relative to its total assets and illustrates how management employs its total assets to make a profit. ROA is used here as one of the proxies for financial performance, and it is calculated as profit before interest and tax/ total assets at the end of the fiscal year X100/1. Table 5 again revealed the effect of total assets employed on corporate social responsibility cost for listed deposit money banks in Nigeria as used in the study, which also differed among the various components of CSR. ENC and CDC recorded a positive and significant effect, as displayed in Table 3. (Consistent with (Niresh & Silva, 2018; Ekundayo *et al*.,2022), while a negative relationship was reported for HSC but insignificant at a 5% level of significance. This is in line with the findings of (Sharma *et al.,* 2021). The implication is that the banking sector will be willing to disclose more information on CRS as they become more familiar with issues on CRS performances. This hypothesis does not conform with the findings of (Lyu *et al.*, 2021 Sharma *et al.,* 2022 Igbekoyi, 2022), who found no association between CSR and financial performance. The reason for such variation could be a result of less attention attributed to HSC in the developing economy or as a result of the area of study or the samples used in the study.

Return on Equity (ROE) and corporate social responsibility

Again, table 5 reveals the effect of total assets employed on corporate social responsibility cost for listed deposit money banks in Nigeria as used in the study. ENC recorded a positive and significant effect, as displayed in Table 3. (Consistent with (Tapang *et al*., 2022; Niresh *et al.*, 2018). A positive relationship was reported for HSC and CDC but insignificant at a 5% significance level. The implication may be due to the sector others investigated the time difference in the volume of data generated for the study. Regrettably, the negative insignificant relationship between HSC and CDC does not represent the reporting it is subjected to. Hence, regulatory bodies require more work to enhance CSR disclosure in these areas.

CONCLUSION AND RECOMMENDATION

The study investigated the relationship between Corporate social responsibility Cost and the financial performance of listed deposit money banks operating in Nigeria and tried to find out if Corporate social

responsibility cost can explain an aspect of a bank's financial performance using ROI, ROA, and ROE as a proxy for financial performance in developing economy like Nigeria.

A hypothesis was formulated that dealt with the effect of the different components of Corporate social responsibility costs on the Financial Performance of deposit money banks in Nigeria.

From the analysis and interpretation, it is observed that ENC had a positive and significant effect on all financial performance indices. HSC had a negative and insignificant effect on ROI and a positive but insignificant on ROA and ROE. On the other hand, CDC had a positive but insignificant effect on all the performance parameters, all conforming to our apriori expectations.

It was observed that all the variables for the independent variables were jointly affected positively and significantly by the performance indices (ROI, ROA, and ROE). Return on Equity (ROE) is first judged from the R square, F statistic, and associated probability. The ROE has an R square of 57.71% and an F stat of 11.82713 with a p-value of 000.

Second is Return on InvestInvestment, which has an R- square of 51.34%, F stat of 9.142961, and a p- p-value of 0.0003. This result formed the underlying basis of the study to add to the literature on the effect of Corporate social responsibility cost on Return on Investment. With this, Return on Investment is also a good indicator of financial performance for further studies on Corporate social responsibility issues. The third and last is the Return on Assets (ROA), which has a low R square of 27.35%, an F stat of 3.263154, and a p-value of 0.0374.

The table below shows a summarized effect of the best model.

Table 6 Best model effect

Models	R-square %	F- statistics
ROE	57.71	11.827
ROI	51.34	9.1430
ROA	27.35	3.2631

The study recommends, among others, that.

Listed deposit money banks should strategize in order to fulfill their corporate responsibility commitments, ensuring that their lending and investment strategies do not encourage environmentally hazardous business activity or waste pollution; more so, a bank that wishes to increase their financial performance, other techniques such as sustainability modernization and continuous improvement must be instigated.

Companies should take social accounting disclosure as part of their normal reporting mandate in order to keep stakeholders informed using an acceptable method, and the report must be separately disclosed and form part of the content report statements;

The government should provide rebates for companies that incur CSR costs to encourage good corporate reportage in addition to the policy framework, which should be designed for corporate social responsibilities in Nigeria by the government and ensure compliance by setting mechanisms and institutions for the implementation of CSR.

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EVALUATION OF FINANCIAL RATIOS AS A MEASURE OF FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

Opara, Chinwe C., Idika, Joel E. and Okoro, Victor O.
Department of Banking & Finance,
College of Management Sciences,
Michael Okpara University of Agriculture, Umudike
Email: opara.confidence@mouau.edu.ng

ABSTRACT
The work examined the effect of financial ratios on the financial performance of listed deposit money banks in Nigeria. Specifically, the study focused on the impact of the activity, market value, loan-to-deposit, and cash-to-total deposit ratios on return on asset. The study utilized the ex post facto design version and analyzed the annual reports of ten selected deposit money banks between 2011 and 2022 as secondary data. The Panel Ordinary Least Squares regression analysis was used to determine the effect of the ratios on return on assets. The results showed that the activity ratio had a negative and non-significant effect on return on assets. In contrast, the market value to book value ratio, cash to total deposit ratio, and loans to deposit ratio had a significant positive effect. The study suggests that banks should lower their leverage ratios to minimize interest costs and financial risk and maintain an ideal level of leverage instead of relying too much on debt financing.
Keywords: Financial ratios, deposit money banks, Nigeria, performance and solvency

INTRODUCTION
Nigerian banks' performance and reporting requirements have significantly changed since the 2005 bank consolidation, transforming the country's banking sector. Deposit money banks play a crucial role in a nation's economic health, particularly in Nigeria. The Central Bank of Nigeria (CBN) has taken proactive measures to enhance the performance of Nigerian banks by enforcing International Accounting Standards and promoting transparency in financial reporting. These measures include disclosing information and using transparent financial accounts, especially financial instruments. Additionally, banks are required to adhere to the same calendar year. These developments have sparked the interest of analysts and scholars keen on assessing Nigerian banks' financial performance. The stability of the financial system and the overall economic growth of Nigeria heavily rely on the success of deposit money banks, as they operate in a dynamic and competitive environment. While financial statements provide data at the end of an accounting period, they do not reveal the sufficiency of profits, the effective utilization of assets, the efficiency of productivity, or any financial difficulties the company faces. However, ratio analysis enables financial performance evaluation by utilizing the necessary information from financial accounts. Without financial ratios, financial statements would be of limited value to anyone other than experts. In light of this, the objective of this study was to examine how financial ratios impact the corporate financial performance of listed deposit money banks in Nigeria.

Financial ratio analysis is used by management as an internal control measure. It is specifically focused on the effectiveness of asset management and the return on investment from investments made in the company's diverse assets. Financial ratio analysis shows a company's growth, operating and financial efficiency. The ability of the company to meet its current obligations, the degree to which it has borrowed money from its long-term solvency, and the effectiveness with which it is using its assets to generate sales revenue, and the company's overall operating efficiency and performance could all be ascertained using the financial ratios (Ndum & Ejimma, 2023).

Investors are primarily attracted to a healthy return on investment. They base their decisions on their impressions and a sufficient understanding of a company's financial performance, which can be obtained through financial statement analysis. Ratio analysis, as mentioned by Dursun, Cemil, and Ali (2013), is a useful tool for stakeholders to assess the financial health of a company. These ratios can be used to compare organizations within the same industry, across different industries, or within a single firm. This technique can also be applied to evaluate the performance of businesses of different sizes. Therefore, it is necessary to assess Nigerian banks' operational performance to identify and highlight performance measures. When evaluating a company's performance, its ability to manage resources such as revenue, expenses, shareholders' equity, and liabilities is typically considered. Effective planning and financial management are crucial for the success of a business and its mission.

The Nigerian banking sector has undergone significant changes in recent decades due to globalization, technological advancements, and regulatory reforms. The sector has become more competitive due to changes in laws and the entry of new competitors. Nigerian deposit money institutions face immense

pressure to maintain profitability and competitiveness. To identify potential risks and take appropriate actions, bank management, investors, and other stakeholders need to assess the performance of banks. During Obasanjo's second tenure, the 2004 banking reform consolidated Nigeria's banks, reducing the number from 89 weak banks to 24 more resilient financial organizations. This was achieved through bank recapitalization, which increased the required capital base from two billion naira to twenty-five billion. However, the Nigerian banking industry still faces challenges in its future development, including the epidemic's impact, currency devaluation, and other major issues.

.Financial analysis may be conducted by the management of a firm or by external stakeholders such as owners, creditors, investors, and others. Different types of analyses can be carried out depending on the specific goal of the analysis. According to Ohaju (2020), economists have shown great interest in examining a company's performance. Financial performance evaluation can be done through analytical and descriptive measurements of the financial situation. Descriptive metrics include total assets, liabilities, shareholders' equity, revenues, expenses, and net income. On the other hand, analytical financial performance metrics include profitability, efficiency, liquidity, and solvency.

LITERATURE REVIEW

Financial ratios are a popular and widely used method for evaluating a company's financial performance and health. These ratios are a collection of quantitative measurements derived from financial statements such as balance sheets, income statements, and cash flow statements. They are essential tools for financial analysis as they provide a quick and easy way to assess a company's financial position. Financial ratios evaluate a company's solvency, profitability, liquidity, efficiency, and market performance, among other aspects of its financial health. They are also frequently used as indices or yardsticks to assess the performance of other firms or a company's performance over time. Ratio analysis is the most useful method for interpreting a company's financial statements, as it allows users to identify their strengths and weaknesses. By shedding light on areas of strong and weak performance, financial ratios offer insightful information about the financial operations of a business and help pinpoint areas in need of development.

The ability of financial ratios to provide a quick and convenient way of assessing a company's financial position is one of its primary advantages (Sani & Dinuka, 2023). Analysts can identify trends and patterns in their financial performance by comparing a company's ratios with historical data or industry benchmarks. This data enables informed decisions regarding strategic planning, risk management, and investment opportunities.

Moreover, financial ratios play a significant role in evaluating potential investment prospects during due diligence. Investors utilize ratios to evaluate a company's future growth potential, its business model's sustainability, and overall financial well-being by assessing key financial parameters such as return on investment, debt-to-equity ratio, and earnings per share (Kalisa & Wesigye, 2022).

Financial ratios are a crucial tool in financial analysis that assesses a company's financial health and performance. They provide valuable insights into a company's operations, enabling stakeholders to make informed decisions regarding strategic planning, risk management, and investment prospects (Ndum & Jimma, 2023).

Activity Ratio

Efficiency ratios, or activity ratios, are financial metrics that demonstrate a company's utilization of its resources. These ratios provide insights into an organization's management of assets and its ability to generate revenue. Activity ratios are vital in assessing a business's operational effectiveness as they indicate how quickly the company can convert its assets into cash or revenue. One commonly used activity ratio is the inventory turnover ratio, which measures the speed at which a company can sell its inventory. A higher inventory turnover ratio indicates that the company can sell its goods quickly, which is generally seen as a positive indicator. This allows the company to utilize the funds saved to support other aspects of the business. Another important activity ratio is the accounts receivable turnover ratio, which measures how promptly a company receives customer payments (Major, 2018). The asset turnover ratio is another critical activity ratio that evaluates how effectively a company utilizes its assets to generate income. In addition to these ratios, other activity ratios, such as the accounts payable turnover ratio, fixed asset turnover ratio, and total asset turnover ratio, are also utilized to assess a company's operational efficiency (Benardi & EEsli, 2022). Therefore, activity ratios are essential for evaluating a company's operational effectiveness and efficiency. By analyzing how efficiently a company uses its assets to generate income, investors and analysts can gain valuable insights into its financial health and prospects. The asset turnover ratio is employed in this study to estimate the activity ratio.

Asset Turnover Ratio

The asset turnover ratio is a financial metric that measures a company's net sales relative to its average total assets. It is useful for evaluating how effectively a business generates revenue from its assets. This ratio assesses a company's ability to generate sales from its assets. By calculating the net sales as a

proportion of sales, the asset turnover ratio determines how many sales are generated from each dollar of corporate assets (Kowoon et al., 2022). A high turnover ratio indicates that a business efficiently uses its assets to generate revenue. In contrast, a low ratio suggests the business needs to improve its asset utilization to increase sales. Therefore, the asset turnover ratio is an important financial indicator that helps businesses evaluate how well they generate revenue from their assets (Kumoro *et al*., 2020).

Market Value Ratio

The market value ratio is a crucial financial measure that provides insights into how investors perceive a company's success in the market (Shubita, 2023). Unlike other ratios, these are based on data not readily available in the company's standard financial statements. Market dynamics influence market value ratios and reflect investors' opinions on the company's prospects.

The price/earnings ratio (PE) is a commonly used market value ratio. Major (2018) states that this ratio is calculated by dividing a company's market price per share of stock by its earnings per share. It is used to assess the value of a company's stock relative to its earnings. A high PE ratio indicates that investors are willing to pay a premium for the company's stock due to their expectations of future earnings growth. Conversely, a low PE ratio suggests that the market needs to be more optimistic about the company's potential for future profit growth (Rahmawati & Huradian, 2022).

Another significant market value ratio is the market-to-book value ratio, which compares a company's market value to its book value (Dadepo & Afabi, 2017). A company with a low PE ratio and a market-to-book value ratio below one is generally considered an unfavourable choice for investors.

Market-to-Book Value Ratio

By contrasting the market value of a company's outstanding shares with its book value, often called the accounting value, the market-to-book value ratio is a financial indicator used to evaluate a company's valuation in the market. One can compute this ratio by dividing the market value per share by the book value per share (Ohaju, 2020). The market price of a company's shares at any one time, as established by the supply and demand of that stock on the open market, is referred to as its market value. The worth of a company's equity, liabilities, and assets, as shown on its balance sheet, is known as book value, on the other hand. The value that remains after deducting all obligations from all assets is what is used to compute shareholder equity.

Investors and analysts frequently use the market-to-book value ratio to assess if a company's shares are undervalued or overpriced (Macit & Topaloglu, 2012). When a ratio is greater than one, investors are optimistic about the firm's growth prospects and potential for future profits, and the market is pricing the company higher than its book value. On the other hand, a ratio of less than one implies that the market is undervaluing the business about its book value, which may be a sign of financial issues or investors' doubts about the company's prospects.

Remembering that market-to-book value ratios can differ greatly throughout industries is crucial. Certain industries place more value on intangible assets like intellectual property or brand value, which might not be represented in a company's book value. Additionally, because of the possibility of debt reduction over time, companies with high debt levels may have a lower book value, leading to a higher market-to-book value ratio. This is because investors may view the company as having greater growth potential. Therefore, while assessing a company's market valuation, analysts and investors can benefit greatly from using the market-to-book value ratio (Shubita, 2023).

Financial Performance

Financial performance, as defined by Dadepo and Afolabi (2017), refers to a company's ability to achieve its financial objectives with its available resources. In the contemporary business landscape, corporate performance has evolved to encompass various stakeholders, as noted by Ipeghan and Ebere (2023). Driven by profit-making goals, managers primarily focus on maximizing shareholders' wealth through increased market capitalization and dividend payments. Creditors are concerned with the timely repayment of loans, while commercial stakeholders prioritize the company's solvency. Workers seek high material benefits and job stability, and the government desires an efficient business that fulfils tax and other mandatory obligations.

Evaluating corporate financial performance involves comparing the assets employed to achieve outcomes with the actual results. The key consideration is how efficiently assets are converted into earnings and how resources are effectively leveraged to generate revenue, as highlighted by Ezekwesili (2021). Strong performance ratios indicate a business's ability to generate significant cash inflows and high sales with minimal resources, as Onyele and Ikwuagwu (2020) emphasized. Given variations in assets, resources, and sales across different sectors, it is essential to assess corporate financial performance by comparing businesses within the same industry.

Businesses utilize financial performance indicators to monitor, assess, and improve their performance, employing ratios for a comprehensive understanding, as Khan and Khokhar (2015) advocated. This analytical approach holds significance for all involved parties, with investors particularly relying on it. A

firm's market value, representing its shareholders' wealth, is influenced by various factors, including the risks it faces, profitability, and potential for future economic growth in terms of earnings.

Effect of Financial Ratio on Corporate Performance

Organizations employ financial ratios as a crucial instrument for evaluating their financial position and making informed decisions that contribute to improved performance, as highlighted by Kariyawasam (2019). These ratios provide valuable insights into a company's liquidity, solvency, efficiency, and overall financial status, all of which significantly impact the company's overall success, as noted by Enekwe (2015). Financial ratio analysis serves as a vital tool for businesses seeking to assess their financial health by shedding light on both positive and negative aspects of their financial performance, according to Ezekwesili (2021). Not only does ratio analysis assess the company's current financial standing, but it also aids in identifying trends by comparing the company's performance across different periods, as emphasized by Mugun (2017).

Furthermore, financial ratio analysis proves beneficial for cross-industry comparisons, allowing businesses to evaluate their financial performance against competitors in the same sector. This enables organizations to gauge their performance on industry averages and identify improvement areas, as Oshoke and Sumaina (2015) suggested. Various financial measures derived from the company's Statement of Financial Position are commonly used to assess performance and financial status, as pointed out by Major (2018). Financial ratio analysis is an indispensable tool providing insightful information about a company's financial health. By utilizing ratios to evaluate profitability, liquidity, solvency, and efficiency, businesses can identify areas for enhancement and make informed decisions that contribute to improved financial performance, as Haralayya (2022) emphasized.

Theoretical Underpinning

The value maximization theory, a prominent financial concept that has garnered recent attention, asserts that a company's primary objective should be maximizing shareholder value in the long term while simultaneously optimizing short-term earnings. Proposed by Michael Jensen in 2001, this theory has gained widespread acceptance as a foundational principle guiding business decision-making (Jensen, 2002). The hypothesis of value maximization contends that businesses should focus on generating sustainable, long-term profits to consistently generate revenue and increase profits, as noted by Ohaju (2020).

Ipeghan and Ebere (2023) emphasize that the value maximization hypothesis extends beyond solely maximizing shareholder wealth; it also seeks to optimize the value for other financial stakeholders, including warrant and debt holders. This underscores the need for businesses to maintain a stable financial condition and fulfil financial commitments to all stakeholders. The practical implications of the value maximization theory significantly influence business decision-making, as Wallace (2003) highlighted.

Given that the value maximization theory places wealth maximization as its central concept, it serves as the foundational principle for the study. This marks a shift from the traditional approach to financial governance, prioritizing wealth maximization over profits over time. With its longer appraisal horizon, this new strategy enables businesses to achieve sustainable efficiency.

Empirical Review

Ndum & Jimma (2023) recently conducted a study on the influence of financial ratios on the corporate financial performance of Nigerian listed commercial banks. The study encompassed thirteen Nigerian deposit money banks listed in the population, with data sourced from the annual reports of ten selected listed deposit money banks between 2012 and 2021. The secondary data were analyzed using Ordinary Least Squares regression analysis, revealing that the market value to book value ratio had a non-significant negative impact on the return on equity of listed commercial banks in Nigeria ($p > .05$). In contrast, the activity ratio had a non-significant positive effect.

Similarly, Suresh and Pradhan (2023) explored the financial results of Private Sector Banks (PSB) and Public Sector Undertaking Banks (PSUB). The study included six PSUB and six PSB banks, chosen based on advances as a percentage of deposits. Utilizing the T-test for independent samples, the researchers compared PSUB and PSB using information obtained from RBI annual reports and secondary sources between 2017 and 2021. Comparative results indicated significant improvement in PSUB, yet they still fell short of the benchmark set by PSB. The CAMEL approach revealed that PSB outperformed PSUB in capital adequacy, non-performing assets, return on assets, and liquid assets to total deposits.

Mbaeri, Uwaleke, and Gimba (2021) examined the impact of the capital adequacy ratio on the performance of Nigeria's listed commercial banks from 2014 to 2019. The study found a significant and positive effect of the capital adequacy ratio on the return on capital employed by Nigeria's listed commercial banks.

In a related study, Ezekwesili (2021) investigated the effect of financial ratios on bank performance in Nigeria using an ex post facto research design. Data were collected from the financial statements of banks

listed on the Nigeria Stock Exchange. The findings revealed that the Loan to Deposit Ratio and the Current Ratio significantly influenced the Net Interest Margin of Nigerian banks.
Furthermore, in a study conducted by Al-khawaldah *et al.* (2020), panel data analysis was utilized to examine the impact of capital adequacy on the return on equity for the largest 16 Islamic banks in the Gulf Cooperation Council, based on market value, during the period from 2010 to 2014. The study, which incorporated size, inflation, and GDP as control variables, drew data from publicly available annual reports of the banks. The findings revealed a robust correlation between capital adequacy and return on equity. Notably, GDP exhibited a statistically significant positive impact on return on equity, while size had a statistically significant positive effect, and inflation showed a statistically significant negative effect.
In a separate investigation by Sile et al. (2019), liquidity was explored as a factor influencing the financial performance of Kenyan banks. The study focused on all 43 commercial banks operating in Kenya between 2012 and 2016. The research used regression analysis and descriptive statistics to find that 82% of the total banks (32 out of 39) responded to the survey. The results indicated a negative correlation between liquidity management and financial performance among Kenyan commercial banks. Throughout the study, it became evident that effective liquidity management was a significant factor influencing the financial performance of these banks.
Once again, Nwachukwu *et al.* (2018) conducted an assessment and comparison of the financial performance of Nigeria's top two banks, Zenith Bank Plc. and Guaranty Trust Bank Plc., spanning the years 2012 to 2016. The study employed formative descriptive statistics to present the findings. The results unveiled a strategic divergence in management priorities with Guaranty Trust Bank Plc. Placing a stronger emphasis on profitability, while Zenith Bank Plc. Focused more on the quality of risk assets and liquidity.
Additionally, Osadume and Ibenta (2018) examined the impact of asset quality, liquidity, and capital sufficiency on the financial performance of specific Nigerian banks. The audited financial reports of individual banks were employed as the secondary data source for the study. Using the Unit Root Test, OLS, Cointegration, and Granger causality method at a 10% significance level, the secondary data from the banks' annual publications underwent testing and analysis. The results indicated a significant relationship between the financial performance of a subset of Nigerian banks and capital adequacy, asset quality, and liquidity in both the short and long term. Furthermore, none of the variables demonstrated Granger causality on each other.
Additionally, Dadepo and Afolabi (2017) analyzed the financial performance of major Nigerian banks, specifically comparing six prominent Deposit Money Banks in the country. The study used secondary data to calculate key financial indicators for Zenith Bank, United Bank for Africa (UBA), Access Bank, First Bank, Guarantee Trust Bank (GTB), Union Bank, and First Bank. Financial ratios were employed to evaluate credit performance, liquidity, and profitability. Zenith Bank Plc. and GTB emerged as the top two performers in the ranking, providing insight into the relative strengths and weaknesses of these banks compared to their competitors. In a study by Popoola et al. (2014), the investigation focused on the correlation between published financial statements and investment decision-making among stakeholders in Nigerian commercial banks. Components such as the cash flow statement, value-added statement, income statement, five-year financial summary, and notes on accounts were significant predictors of sound investment decision-making. In contrast, the statement of financial position exhibited a negative relationship with decision-making. Parvesh and Sanjeev (2014) employed the CAMELS rating model to assess the performance of established private-sector banks in the Indian banking system. The model incorporated various ratios to analyze the financial performance of thirteen chosen banks. Six of these banks demonstrated either good or exceptional financial performance, and their performance ranking was determined based on the analysis of CAMELS ratios. John and Oke (2013) analyzed the capital sufficiency of six banks before and after Nigeria's 2004 bank recapitalization strategy, spanning three to seven years. The ordinary least square estimate method revealed that capital adequacy impacted bank performance, specifically on earnings per share and profit after tax.

METHODOLOGY

For 2011–2022, this study looked into how financial ratios affected the financial performance of Deposit Money Banks in Nigeria. The yearly financial reports of the banks are where the data were obtained.

Model Specification

A financial ratio called return on asset (ROA) displays the percentage of profit a business makes compared to its total resources. It is generally expressed as the division of total assets by net income. This figure, which represents the value of earnings derived from each quantity of controlled assets, illustrates what a corporation can do with its resources.
The activity ratio, or ATR, gauges how well a business uses its resources to produce income. The market value to book value ratio, or MBR, indicates the premium investors are prepared to pay over book value for a company's shares.

The cash quantifies liquidity management risk to total deposit ratio (CTD) and loan to deposit ratio (LTD). CTD displays a bank's lending capacity based on its mobilized deposits. Additionally, it gauges the primary banking activity (Suman& Raj, 2016). A common metric for evaluating a bank's liquidity is LTD. The computation involves dividing the total loans made by the bank by the entire amount of deposits. Banks may need more liquidity to meet unforeseen funding requests if the ratio is excessively high. The bank's profitability may suffer if the ratio is too low (Saleh, 2014).
The functional relationship among ROA, ATR, MBR, CTD and LTD can be expressed as follows:

$$ROA = F(ATR, MBR, CTD \text{ and } LTD) \qquad \text{Eqn. (1)}$$

The econometric form of the model is as specified in Eqn. (2):

$$ROA_{it} = \beta_0 + \beta_1 ATR_{it} + \beta_2 MBR_{it} + \beta_3 CTD_{it} + \beta_4 LTD_{it} + \mu_{it} \qquad \text{Eqn. (2)}$$

Where,
β_0 = constant
$\beta_1 - \beta_4$ = coefficients of thepredictors
μ = white noise for firm i in period
ROA_{it} = return on asset for firm i in period
ATR_{it} = Activity ratio for firm i in period
MBR_{it} = Market value ratio for firm i in period
CTD_{it} = cash to total deposit ratio for firm i in period
LTD_{it} = liquidity for firm i in period
μ_{it} = white noise for firm i in period

Estimation Approach
Testing was done on the gathered data using both diagnostic and specification tests. Regression analysis model misspecification can seriously affect the sample characteristics of estimators and tests (Hacini et al., 2021). Corresponding consequences also apply to projections and other conclusions that might be made using the fitted model. As a result, methods for assessing a model's specification quality are heavily stressed in the econometrics literature. The assumptions that might have been made regarding the distribution of the model's error term are addressed in these processes, which also concentrate on the structural specification of the model, including its functional form, regressor selection, and potential measurement errors.
As a result, the data were subjected to the tests listed below before regression analysis, and any inconsistencies were addressed by making the necessary adjustments. Data processed for panel data issues was examined and displayed using a random effects panel Estimate Generalized Least Squares Method utilisingEViews software. Based on the findings of the panel regression study, inferences were made after interpreting the regression output.
Hausman Test
The researcher conducted a Hausman test using the null hypothesis that the random effects model was the more appropriate fit for the data than the fixed effects model to choose which model to use: the random effects model or the fixed effects model. Wooldridge (2009) states that the fixed and random effects models are expressed as follows:

$$Y_{it} = X_{it}\beta + \alpha_i + \mu_{it} \quad \rightarrow \text{Fixed Effects} \qquad \text{Eqn. (3)}$$

$$Y_{it} = X_{it}\beta + \alpha + \mu_{it} + \varepsilon_{it} \rightarrow \text{Random Effects} \qquad \text{Eqn. (4)}$$

Where X_{it} = variable vector
β = coefficients vector
Time-invariant variables can function as explanatory variables since random effects presume that the entity's error term is not connected with the predictors. As a result, the random effects model enables extrapolating conclusions from the model's sample. According to Wooldridge (2009), time-invariant characteristics are constant for each entity, so they cannot create changes within a person or entity. Instead, fixed effects models are intended to investigate the causes of changes within an entity. In essence, the Hausman test determines if the unique mistakes (μ_it) have a correlation or not with the regressors; if not, the null hypothesis is true. Running the random effects model after the Hausman test in EViews is necessary to complete the test.

RESULTS AND DISCUSSIONS
Descriptive Statistics
The descriptive statistics test was run by using EViews, and the output is shown in Table 1:

Table 1: Group Descriptive Statistics

	ROA	ATR	MBR	CTD	LTD
Mean	0.124700	0.109155	0.941329	10.35462	2.401400
Median	0.120000	0.110000	0.650000	7.150000	2.420000
Maximum	2.940000	0.240000	6.810000	74.91000	5.280000
Minimum	-3.940000	-0.090000	-1.714909	-18.86400	-1.980000
Std. Dev.	0.476044	0.038701	1.053176	11.58494	0.851426
Skewness	-3.521135	-0.639358	2.592079	2.592079	-0.639358
Kurtosis	55.59950	9.004755	12.86337	12.86337	9.004755
Jarque-Bera	14081.50	188.4610	620.8078	620.8078	188.4610
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	14.96400	13.09855	112.9595	1242.554	288.1680
Sum Sq. Dev.	26.96754	0.178236	131.9924	15971.08	86.26623
Observations	120	120	120	120	120

Source: EViews software output

The Jarque-Bera test compares the alternative of non-normality with the null hypothesis of normalcy. The values were widely scattered from their mean values, as indicated by the standard deviation. This implies that the standard deviation will rise along with the mean value and vice versa. ATR's low standard deviation suggests that it deviates little from its mean. We reject the null hypothesis and conclude that the variables are not normally distributed since Table 1's p-values for every variable are all zero, suggesting that the Jarque-Bera values are significant at all significance levels. According to the data's Kurtosis values, the variables have a leptokurtic distribution, meaning their values are greater than the corresponding sample means (> 3).

Model Estimation

Three methods are used to estimate the study's model: Random Effect, Fixed Effect, and Ordinary Least Squares (OLS).

Table 2: Pooled OLS results

Dependent Variable: ROA
Method: Panel Least Squares
Date: 10/14/23 Time: 08:33
Sample: 2011 2022
Periods included: 12
Cross-sections included: 10
Total panel (balanced) observations: 120

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ATR	0.149957	0.596897	0.251228	0.8140
MBR	-0.186176	0.082927	-2.245057	0.0881
CTD	0.786345	0.312863	2.513389	0.0458
LTD	-0.033919	0.185353	-0.182997	0.8637
C	-0.152204	0.129807	-1.172545	0.2434

R-squared	0.500731	Mean dependent var	0.124667
Adjusted R-squared	0.469452	SD dependent var	0.476032
SE of regression	0.459204	Akaike info criterion	1.322129
Sum squared resid	24.24986	Schwarz criterion	1.438275
Log-likelihood	-74.32776	Hannan-Quinn criteria.	1.369297
F-statistic	3.220409	Durbin-Watson stat	2.472801
Prob(F-statistic)	0.015158		

Source: EViews software output

Table 2 indicates that the data, where F (P-value) = 0.015158, is well-fitted by the Pooled OLS model. According to the factors' coefficients of analysis, ROA is significantly impacted by CTD (p-value = 0.0458) but not significantly by ATR (p-value = 0.8140), MBR (0.0881), LTD (p-value = 0.8637), or by MBR (0.0881).

Table 3: Fixed-Effects results

Dependent Variable: ROA
Method: Panel Least Squares
Date: 10/14/23 Time: 08:34
Sample: 2011 2022
Periods included: 12
Cross-sections included: 10
Total panel (balanced) observations: 120

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ATR	-0.090727	0.215275	-0.421449	0.6775
MBR	0.641749	0.237810	2.698583	0.0131
CTD	-0.126934	0.055262	-2.296937	0.0332
LTD	0.372623	0.124117	3.002196	0.0066
C	8.199332	1.825797	4.490823	0.0002

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.641388	Mean dependent var	0.124667
Adjusted R-squared	0.626087	SD dependent var	0.476032
SE of regression	0.467364	Akaike info criterion	1.425864
Sum squared resid	23.15349	Schwarz criterion	1.751072
Log-likelihood	-71.55185	Hannan-Quinn criteria.	1.557932
F-statistic	10.34268	Durbin-Watson stat	2.258334
Prob(F-statistic)	0.000000		

Source: EViews software output

To test the appropriateness of the fixed effect model, the study checked the heterogeneity between the banks (i) based on the following hypothesis:

Ho: sigma(i)^2 = sigma^2 for all i

H_1: sigma(i)^2 ≠ sigma^2 for all i

Table 3 shows that F = 10.34, Prob. > F = 0.00, so the Ho is rejected, and the fixed effect model is appropriate because there is heterogeneity between the banks. MBR, CTD and LTD have significant effects on the ROA, while ATR has no significant effect on the ROA.

Table 4: Random-Effects GLS results

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 10/14/23 Time: 08:34
Sample: 2011 2022
Periods included: 12
Cross-sections included: 10
Total panel (balanced) observations: 120
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ATR	0.299262	0.118940	2.516071	0.0197
MBR	0.421589	0.315049	1.338172	0.1945
CTD	0.106168	0.030824	3.444272	0.0023
LTD	-0.076439	0.048059	-1.590509	0.1260
C	-0.152204	0.132113	-1.152073	0.2517

Effects Specification

	SD.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	0.467364	1.0000

Weighted Statistics			
R-squared	0.600731	Mean dependent var	0.124667
Adjusted R-squared	0.569452	SD dependent var	0.476032
SE of regression	0.459204	Sum squared resid	24.24986
F-statistic	3.220409	Durbin-Watson stat	2.472801
Prob(F-statistic)	0.015158		

Unweighted Statistics			
R-squared	0.100731	Mean dependent var	0.124667
Sum squared resid	24.24986	Durbin-Watson stat	2.472801

Source: EViews software output

The Breusch and Pagan Lagrangian multiplier (LM) test was employed in the study to evaluate the suitability of the random-effects model. Based on the following hypotheses, the LM test assists in determining which regression type to use: OLS or random-effects.

H_0: No difference across units.

H_1: Difference across units

Table 5: Breusch Test

Test: var(u)=0	
Chibar2(01)= 3.98	Prob>chi^2 = 0.0231

Source: EViews software output

Table 5 demonstrates that the Breusch test's Prob (Chi2) is 0.0231, or less than 5%. This suggests that the random-effects model fits the available data. There is a direct association between the two variables, as indicated by the regression findings for the random effects model, which showed that ATR and CTD had a substantial effect on ROA.

The Hausman test should now be used to select between the study's fixed effects and random effects models.

Hausman Test

The Hausman test was used to compare and select between the fixed and random effects results to determine which model better fit the data. It did this by evaluating the following hypothesis:

H_0: Random effects model is the appropriate model.

H_1: The fixed effects model is the appropriate model.

Table 6: Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.51808	4	0.0204

Source: EViews software output

Table 6 indicates that the test's probability (or Chi-Square statistics)is less than 5% (0.0204). As a result, the fixed effects model is the more appropriate model and the null hypothesis that the Random effects model is the most appropriate was rejected. Compared to the random effect model, the fixed effect model provides a better explanation for how financial ratios affect the financial performance of deposit money institutions in Nigeria.

Test of Hypotheses Based on the Fixed Effects Model

The bank's financial performance, as determined by the return on assets, is adversely impacted by the activity ratio (ATR). ATR does not significantly impact the ROA of Nigerian-listed deposit money banks. The ROA marginally reduces by 0.090727 units for every unit rise in the ATR, according to the activity ratio (asset turnover ratio) coefficient of -0.090727. At the traditional significance threshold ($\alpha = 0.05$), the probability value 0.6775 suggests this link is not statistically significant. Consequently, it can be said that the ATR negatively affects the ROA of Nigerian-listed deposit money institutions in a non-significant way ($p > .05$).

The market value to book value ratio (MBR) has a coefficient of 0.641749, meaning that the ROA rises by 0.641749 units for every unit increase in the MBR. This link is statistically significant at the usual significance level ($\alpha = 0.05$), as indicated by the probability value 0.0131. Consequently, it can be said that there is a statistically significant positive impact of the market value to book value ratio on the return on assets of Nigerian listed deposit money banks ($p > 0.05$).
With a negative estimated cash-to-total deposit ratio (CTD) coefficient of 0.126934, ROA reduced by 0.126934 units for every unit increase in CTD. At the 5% significance level, the likelihood value of 0.0332 indicates that the impact of CTD on ROA is statistically significant. Thus, the return on assets (ROA) of listed deposit money banks in Nigeria is statistically significantly impacted by CTD.
The coefficient of loan-to-deposit ratio (LTD) was determined to be 0.372623. This means that for every unit rise in LTD, the return on assets (ROA) would increase by 0.372623 units. The impact of the loan-to-deposit ratio on the return on assets of list deposit money banks in Nigeria is statistically significant at the 5% significance level, according to the probability value of LTD, which is 0.0066.

Discussion of Findings

The ATR calculates a bank's asset management efficiency. An increased activity ratio suggests that a bank is making better use of its resources to produce income. Higher activity ratios and return on assets are inversely correlated with Nigerian deposit money institutions. This implies that banks with lower returns on assets typically manage their assets inefficiently. This detrimental effect can be explained by banks with lower activity ratios being less profitable since they cannot produce more revenue from the same amount of assets. This result differs from Kalisa&Twesigye's (2022) findings.
The market's assessment of a bank's worth relative to its book value is gauged by the market value to book value ratio or MBR. An elevated market value to book value ratio suggests investors have high expectations for the bank's future growth. On the other hand, a greater market value to book value ratio is positively connected with the return on assets in the case of Nigerian deposit money banks. This beneficial effect can be attributed to the fact that an optimal valuation can be achieved by realistic growth expectations created by a high market value-to-book ratio. When these expectations are fulfilled, the bank's stock price might increase and lead to a higher return on assets. This, however, does not agree with the findings of Oshoke and Sumaina (2015).
When banks keep more cash than deposits, CTD rises. Customers of the bank now have more faith that it will be able to provide their deposits upon request, thanks to the growth in CTD. However, if CTD rises above a particular threshold, the bank will lose out on opportunities and deposit interest, which will harm the bank's bottom line. As a result, the Nigerian banks may have kept a sizable amount of cash on hand (surplus liquidity) to meet the demand for withdrawals of deposits. This result is consistent with a previous study by Mishra and Pradhan (2019).
Due to its role in evaluating the bank's liquidity and assisting investors in determining if it is managing its liquidity appropriately, the loan-to-deposit ratio (LTD) positively and significantly impacts the financial performance indicator (ROA). The ratio significantly and favourably impacts the bank's performance if it is moderately high, indicating it has enough liquidity to cover any financing needs, such as loan default or an economic downturn. According to research by Abbas and Mourouj (2015) and Laminfoday (2018), an increase in this ratio suggests that the bank will require more funding to fulfil loan demands. Higher financing costs result from selling certain assets or taking out a loan from the money market, reducing earnings and increasing debt.

CONCLUSION

This study centres on the significance of financial parameters and their impact on the financial performance of deposit money banks in Nigeria between 2011 and 2022. Return on assets (ROA) and financial ratios such as activity, market book value, loans-to-deposit, and cash-to-deposit ratios were used to gauge financial success. This study offers several conclusions.
The activity ratio was found to have a detrimental impact on the financial performance of Nigerian banks. The market book value and liquidity ratios favourably impact Nigerian banks' financial results. The favourable outcome is explained by the likelihood that the banks did not require additional funding to fulfil loan demands, nor was it necessary to borrow money from the money market or sell some assets. As a result, the banks might have to pay less for financing, which raises earnings and lowers debt. The findings also showed that cash positively impacts the banks' financial performance to deposit ratio. This is because having cash below a specific threshold lowers idle money, prevents opportunity costs from occurring, and increases the interest on paid deposits—all of which benefit the bank's profitability.
Based on this study's findings, several recommendations can be made. The activity ratio is crucial to the bank's profitability even if it has a non-significantly beneficial impact on the return on assets of Nigeria's listed deposit money banks. In order to increase profitability, banks are advised to work towards increasing their asset turnover ratio and operational efficiency. The market value to book value ratio has a

noteworthy positive impact on the return on assets of Nigerian listed deposit money institutions, indicating that a higher market perception of a bank's worth is indeed associated with increased profitability. Consequently, banks are advised to monitor market sentiment and work to enhance their core competencies and financial indicators.

Some semi-liquid investments must be kept in order to guarantee that there is no future exposure to liquidity risk. The bank ought to boost its investment and benefit from the additional liquidity that is accessible when making loans. To boost their profitability, Nigerian banks need to spend their excess liquidity. Nigerian banks must also implement innovative strategies to manage their liquidity to minimize risks effectively.

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IMPACT OF FUND RECOVERY FROM CORRUPT PUBLIC OFFICE HOLDERS ON HUMAN CAPITAL DEVELOPMENT IN NIGERIA

Ibeabuchi-Ani Ogechi, Okezie, Chika G. and Useh, Udeme F.
Michael Okpara University of Agriculture, Umudike, Abia State.
Corresponding author: ogeibeabuchian@gmail.com

ABSTRACT
The study examined the impact of fund recovery from corrupt public officeholders on human capital development in Nigeria over the twenty-two years from 1990 to 2022. The study ascertained the impact of fund recovery from corrupt public office holders on Nigeria's per capita income and the impact of fund recovery from corrupt public office holders on Nigeria's human capital index. The study adopted an ex-post research design. The study data were sourced from the Central Bank of Nigeria Statistical Bulletin and World Data, 2022. The stated hypotheses were analyzed with simple regression. The study provided empirical evidence that validated the a priori expectations. The findings of the study revealed that fund recovery from corrupt public officeholders has a positive but insignificant impact on Nigeria's per capita income. Also, fund recovery from corrupt public officeholders has a positive but insignificant impact on Nigeria's human capital index. It was recommended that the government should make judicious use of recovery funds to enhance human capital development in the country.
Keywords: Fund recovery, corrupt public office holders, per capita income, human capital development and human capital index.

INTRODUCTION

Fund recovery has become a major topic of discussion in the media because of its significant effect on the country's economic development. The country's track record of fund recovery from corrupt public office holders can be traced back to 1984, when the former military Head of State, Mohammadu Buhari, formally requested the British government's assistance in recovering funds stolen and hidden in United Kingdom banks by the Second Republic's elite political class (1979-1983) (Agbakaba, 2017). The request was later quietly dropped after Prime Minister Margaret Thatcher announced her intention to reveal a list of Nigerian bank account holders in the UK (Graf, 2010). Fund recovery can be defined as the amount of funds recovered from looting committed by public officeholders over one year (Akinpelumi, 2018)

Recovering funds held by Nigeria's corrupt public officeholders is vital for economic development. Since 1999, Nigeria's government has recovered billions of dollars in foreign banks held by corrupt past and present public officeholders. For instance, in 1999, Nigeria recovered $750 million from corrupt public officeholders in the country. In 2000, $500 million was also recovered. In 2002, Nigeria recovered $500 million from Switzerland. In 2003, another $149 million was recovered in Jersey Island. In 2004, $458 million was recovered from Switzerland by the President. In his second term, President Olusegun Obasanjo continued to receive funds from other countries. Most of these funds were recovered from funds held by former President General Sani Abacha (Amahalu *et al.,* 2016).

Also, in 2005, Tafa Balogun was convicted, and the Nigerian government recovered an undisclosed amount of money. From 2006, 2007 to 2010, ₦ 3.9 billion, $55 million, $25 million, and $13 million were all respectively recovered within that period (Alege *et al.,* 2014). During the tenure of President Goodluck Jonathan from 2011 to 2015, ₦106,334,466.45 million, ₦99 083,241.75 million, ₦15 944,222.40 million, ₦76 234,290.75 and $9.1 billion, respectively. During President President Mohammadu Buhari's government from 2016 to 2022, several funds were also recovered from corrupt public office holders in the country. In 2016, $723 million was recovered; in 2017, $322 million was recovered; in 2018 and 2019, $106million and $308 million were recovered (Awojobi, 2019), and in 2020 and 2022, $513 million and $362 million were also recovered.

It should be noted that inspired by the funds recovered by the Nigerian government over the years. Most scholars believe that most of the funds are re-looted either by the head of recovering agencies such as EFCC or other heads of sister agencies in the country, and it is assumed that these recovering funds have not translated to per capita income and human development index in the country (Akinpelumi, 2018). In addition, Nigerian governments over the years have taken various steps and policies and even set up anti-corruption agencies such as the EFCC and the ICPC to fight against treasury looting by previous leaders, but with little or no results in terms of economic development. For some years, as a result of these agencies, the government of Nigeria has continued to recover funds from past and current officeholders in Nigeria that were stashed in foreign accounts, which is assumed to have a negative impact on the country's per capita income and human capital index This situation is an indication that the current state of affairs in Nigeria is a result of the systematic looting of the country's public office holders by the past and present

leaders, which has affected every aspect of the lives of Nigerians(Awojobi, 2019). Hence, the study examined the impact of fund recovery from corrupt public holders on human capital development in Nigeria using per capita income and human capital index as proxies.

REVIEW OF LITERATURE

Recovery Fund

Most scholars and organizations have tried to define a recovery fund. For example, UNCAC Coalition (2022) defined a recovery fund as "the process of recovering and repatriating the proceeds of corruption which have been transferred abroad to the countries of origin from which the funds were taken or to the rightful owners of the funds." Recovery fund refers to the process of recovering the funds of corruption that have been transferred abroad and repatriating the funds from the countries of origin or to the rightful holders of the funds. Recovering funds does not only refer to the recovery of funds that have been stolen or embezzled by corrupt agents or the confiscation of the lavish properties they have illegally acquired abroad. It also includes the recovery of funds of private origin, such as the illicit gains, benefits or advantages obtained by companies from the monetary value of a bribe paid to a foreign official. Investment or resource recovery, also known as "recovery" or "investment recovery," is the process of maximising the value of unutilized or "end-of-life" assets by effectively reutilizing or transferring them. Although sometimes referred to as a company undergoing liquid

Recovery fund also refers to the process of disposing of surplus inventory, refurbished products, and equipment returned upon completion of a lease. Similarly, a recovery fund refers to the task of recovering assets that have been stolen, misappropriated, or otherwise disposed of in order to remove them from the rightful owner. There are three main steps in the recovery fund process: Identifying assets, Redeployment, and Divestment. Specialized asset recovery software can help with any of these steps. Recycling assets is an essential tool in the fight against corruption, as well as in the fight against poverty in developing countries. In Nigeria, for example, increased allocations to pro-poor sectors were made after the repatriation of $500 million of Abacha's boot leggings from Switzerland. However, the use of recovered assets for anti-poverty programs and the promotion of development require better oversight mechanisms.

Fund recovery corrupt public holders on per capita income in Nigeria

Nigeria is one of the best examples of recovering stolen funds outside the country. The Nigerian government under President Olusegun Obasanjo was able to recover money from looters and put it into the national coffer. For example, President Obasanjo recovered $750 million as revenue from treasury looters. In 2000, the same Obasanjo government also recovered revenue from previous officeholders in Nigeria. In 2002, Obasanjo got a total of $1,2 billion as revenue from looting by previous leaders and politicians from Switzerland. In 2003, the Obasanjo administration received $149 million as revenue from Jersey Island as a result of looting by General Sanni Abacha.

In addition, $458 million was also recovered from Switzerland by the government in 2004 from the loot of General Sani Abacha. In 2005, while still in office, $458 million was also recovered from Switzerland from the loot of Gen. Sani Abacha by the government. In December 2005, Sani Abacha was sentenced to 6 months in prison, and $150 million of his assets were ordered to be seized by the court. In 2015, the EFCC recovered $3.9 billion as revenue for the Federal Government of Nigeria. In the 2007 fiscal year, the amount recovered was $4.7 billion after a review of all allocations and expenditures. However, despite the recovered funds from previous leaders and politicians, the country has yet to invest much or any in capital projects that would increase per capita income. Instead, it is expected that most of the recovered funds have been recouped by the current crop of leaders.

Obasanjo's rule was characterized by unconscionable profiteering, disregard for due process, disregard for human rights, the selective prosecution of corrupt officials, and inept management of the economy. In addition, the post-Obasanjo revelation revealed that he disregarded due process in the award of contracts and sold the state-owned property to his cronies at below-market value (Imhonopi *et al.,* 2013)

Impact of fund recovery corrupt public holders on the human capital index in Nigeria

President Jonathan was sworn in on 6 May 2010, and his term of office expired on 29 May 2015. According to some scholars, including Usman (2013), President Jonathan's government showed a lack of political initiative, a high level of apathy and helplessness in fighting treasury looters in Nigeria, in spite of numerous allegations of corruption made against government officials. For example, in 2013, several members of the National National Petroleum Corporation (NNPC) board were impeached, and the Minister of Petroleum was impeached, but to what surprise most scholars.

After the President sacked the board members of NNPC, he did not sack the Minister of Petroleum "Mrs Daziani" Allison Madueke. Five different investigative panel committees also indicted Madueke's reports at different times. However, she remains in charge as the minister of petroleum, unperturbed by President Goodluck Jonathan's administration. In 2011, the government recovered ₦ 106.334.466.45 million as revenue from previous leaders and politicians in Nigeria. In 2012, the government also recovered

₦99.83.241.75 as revenue. In 2013, the government received ₦15.944.40 as revenue from former leaders and politicians. In 2014, ₦76.234.290.75 was returned to the national

Human capital development

Human capital development is the process of obtaining and expanding the number of people with the skills, education, and experience that are essential for a country's economic progress. Human capital refers to the abilities and skills of human resources (Eigbiremolen and Anaduaka, 2014). Theoretically, this Human Capital Development (HCD) has a favourable influence on economic growth. However, it could not be applicable or equal. Human capital development becomes a key concern for policymakers and practitioners involved in economic development at the national and regional level as the global economy shifts toward more knowledge-based sectors and skills (such as the manufacturing sector like the manufacturing of ICT devices, pharmaceuticals, and telecommunication) (Adelakun, 2011; Amassoma and Nwosa, 2011).

Human capital development, which is synonymous with human capital formation, human resource development, and investment in human capital, refers to the process of acquiring and growing the population of people who have the knowledge, abilities, and experience necessary for a nation's economic and political development (Wilson, 2017). The origins of disparities in human capital are innate ability, education, teaching quality, non-schooling investments, training, and effects prior to the labour market. The primary subjects of this study are government spending on health care and other non-educational initiatives like training. The development of human capital in Nigeria began with the Eric Ashby Commission in 1959. It served as the cornerstone for the growth of higher education in Nigeria (Oluwatobi and Ogunrinola, 2011).

Human Development Index

The Human Development Index is a statistical tool used to measure a country's overall achievements in its social and economic dimensions. This paper tried to find significant factors affecting the Human Development Index, like the health index, education index, and income index. It was developed and launched by Pakistani economist Mahbub-ul-Haq, followed by AmartyaSen, an Indian economist, in 1990. The Human Development Index is a comprehensive tool devised by the United Nations for measuring the levels of social and economic development of different countries and ranking them accordingly. It is a comparative measure of life expectancy, education, literacy and standard of living. Essentially, the Human Development Index, HDI, makes use of four parameters for measuring and ranking countries according to their social and economic development, which include the Life Expectancy at Birth, Expected Years of Schooling, Mean Years of Schooling and Gross National Income per Capita (Awojobi, 2019).

Theoretical Framework

Game Theory

Game theory was propounded by Macrae in 1982. Game theory states that fund recovery is part of a rational decision of government in the face of a deeply rooted corrupt government. This theory borrows from economic literature and seeks to provide rationales for recovery fund decisions by public officials. In particular, Macrae (2016) is of the opinion that looters of treasury in any nation are detrimental to the progress of that nation. Moreover, that citizens should not partake in it (Bamidele, 2018).

Empirical Review

Peter *et al.* (2020), examined the effect of corruption on Nigeria's Vision 20:2020. The study adopted a descriptive survey design. The study revealed that corruption is not only high in Nigeria but also permeates all the facets of the public and private sectors. The research went further to highlight the various possible ways through which corruption would impede the actualization of NV 20:2020 in Nigeria. The study recommended that the country needs a committed, transparent and purpose-driven government that is determined to reduce corruption to the barest minimum. To achieve this, the foremost anti-corruption agencies in the country, ICPC and EFCC, should be granted full autonomy and should be provided with a special court. The constitution should be amended to include stiffer punishment meted out to offenders to the tune of death or life imprisonment as practised in China, Malaysia and some other countries.

Adekunle (2019), conducted a study on the effect of the Federal Government towards looted assets recovery in Nigeria, which is a means of fighting corruption and terrorism and enhancing national development. The stated hypotheses were analysed using regression analysis and correlation coefficient. The finding of the study revealed that a correlation coefficient of 0.673 indicates a strong and positive relationship between the rank of the Global Peace Index and the rank of the Corruption Perception Index in Nigeria. Also, the regression value of 0.453 indicates that 45.3% of the Corruption explains Terrorism in Nigeria, and the significance level of the computed test statistics is 0.033, which affirms that there is a significant relationship between Terrorism and Corruption in Nigeria. Corruption and terrorism directly or indirectly hinder national development. Therefore, the importance of recovering looted assets cannot be overemphasized. Asset recovery has become one of the major themes in discourses on national

development funding, which is part of the enormous amount of resources that are lost annually by developing countries. The null hypothesis was hinged on the first objective, which states that there is no relationship between corruption and terrorism in Nigeria. Regression analysis was adopted to examine the relationship between corruption and terrorism. The correlation coefficient of 0.673 indicates a strong and positive relationship between the rank of the Global Peace Index and the rank of the Corruption Perception Index in Nigeria. Also, the regression value of 0.453 indicates that 45.3% of the Corruption. It was recommended that there be an international collaboration, complete autonomy, or total independence of the concerned institution to enhance the efficiency of recovering assets and strict monitoring towards utilization of recovered assets to prevent re-looting. In order to reduce the high level of terrorism in the country, corruption must be tackled.

METHODOLOGY

The study methodology was based on an ex post facto research design. Data was extracted from the CBN statistical bulletin and annual reports, the National Bureau of Statistics (NBS) and other relevant publications. Data was collected between 2000 and 2022, while regression analysis was employed to determine the cause and effect of a relationship that exists between variables.

Model specification

The model one based on hypothesis 1

PCI = F(FRCP) ……………..……………………..……………………….(1)

$PCI = \beta_0 + \beta_1$ FRCP + U_t…………………………..…………….…………(2)

For the variable to be at the same level, this can be transformed to log

$LOGPCI = \beta_0 + \beta_1 LOGFRCP + U_t$…………….………………………………...(3)

Where:

LOGPCI = Per capita income
LOGFRCP = Fund recovery from corrupt public holders
Ut = Stochastic Variable (error term)
β_0 = Intercept,
β_1 = Parameter estimate

Model one based on Hypothesis 2

HCI = F(FRCP) ……………..……………………..……………………….(1)

$HCI = \beta_0 + \beta_1$ FRCP + U_t…………………………...…………….…………(2)

For the variable to be at the same level, this can be transformed to log

$LOGHCI = \beta_0 + \beta_1 LOGFRCP + U_t$…………….………………………………...(3)

Where:

LOGHCI = Human capital index
LOGFRCP = Fund recovery from corrupt public holders
Ut = Stochastic Variable (error term)
β_0 = Intercept,
β_1 = Parameter estimate

RESULTS AND DISCCUSSIONS

Simple Regression Analysis for the Study

Table 1: Regression Analysis for Hypothesis 1 (dependent variable, LOGPCI)

	Coefficient	Std. Error	t-Statistic	Prob.
LOGFRCP	1.043121	1.742961	0.598476.	0.8031
C	1.108329	1.642091	0.674949	0.7329
R-squared	0.541304			
Adjusted R-squared	0.531522			
F-statistic	0.413247			
Prob(F-statistic)	0.992163			
Durbin-Watson stat	1.782037			

Source: EViews 11 Output

From the regression results as shown in table 4.1, the adjusted R-squared of 0.531522 reveals that approximately 53% of the total variations in the dependent variable (Per capita income(LOGPCI) was accounted for by the explanatory variables (recovery fund from corrupt public holders (LOGFRCP), while the remaining 47% was due to the error term. The probability of an F-statistic of (0.992163) indicates that the entire result was statistically insignificant at 5%). The coefficient of recovery funds from corrupt public holders (LOGFRCP) was 1.043121. This implies that a unit increase in recovery funds from corrupt public holders led to a corresponding increase in Per capita income(LOGPCI) by 1.043121 units. The constant (C) implies that ceteris paribus (holding the explanatory variable constant), Per capita income(LOGPCI) increased by 1.108329 units.

Test of Hypotheses

For the hypotheses testing, the decision was based on the p-values of the t-statistics associated with each coefficient of the independent variables. If a p-value is less than 0.05 (5%), the null hypothesis is rejected. However, if a p-value is greater than 0.05 (5%), the null hypothesis is accepted.

$H0_1$: Fund recovery from corrupt public holders has no significant impact on per capita income in Nigeria

The p-value (0.8031) of fund recovery from corrupt public holders (LOGFRCP) in Table 1 is greater than 0.05. Hence, the null hypothesis (Ho1) was accepted, and the alternative hypothesis rejected that fund recovery from corrupt public holders has a positive but insignificant impact on per capita income in Nigeria.

Table 2: Regression Analysis for Hypothesis 2 (dependent variable, LOGHCI**)**

	Coefficient	Std. Error	t-Statistic	Prob.
LOGFRCP	1.013017	1.730866	0.585266	0.8143
C	1.135229	1.372421	0.827172	0.3217
R-squared	0.513823			
Adjusted R-squared	0.502432			
F-statistic	0.193247			
Prob(F-statistic)	0.103843			
Durbin-Watson stat	1.839417			

Source: EViews 11 Output

From the regression results as shown in Table 2, the adjusted R-squared of 0.513823 reveals that approximately 51% of the total variations in the dependent variable (Human capital index (LOGHCI) was accounted for by the explanatory variables (recovery fund corrupt public holders (LOGFRCP), while the remaining 49% was due to the error term. The probability of an F-statistic of (0.103843) indicates that the entire result was statistically insignificant at 5%). The coefficient of recovery funds from corrupt public holders (LOGFRCP) was 1.043121. This implies that a unit increase in recovery funds from corrupt public holders led to a corresponding increase in Per capita income(LOGPCI) by 1.013017 units. The constant (C) implies that ceteris paribus (holding the explanatory variable constant), Per capita income(LOGPCI) increased by 1.013017 units.

Discussion of Results

The study examines the impact of fund recovery from corrupt public holders on human capital development in Nigeria. The stated hypotheses were analysed with simple regression. The result of the first hypothesis revealed that fund recovery from corrupt public holders has a positive but insignificant impact on per capita income in Nigeria. The result holds on the ground that most of the funds recovered have been re-rooted by those in government, and this has made the funds recovered have no impact on per capita income. In addition, over the years, the Nigerian government has received funds from corrupt public holders, but there is nothing to point at in the country as a result of recovered funds from the government. This has constituted a severe issue on per capita income. The finding of the study is in line with the work of (Agbakaba, 2017).

The finding of the 2nd hypothesis revealed that fund recovery from corrupt public holders led to a corresponding increase in Per capita income(LOGPCI). This result holds on the ground that the Nigerian government has yet to be able to put to use the funds recovered from corrupt public officeholders in the country. This may be due to a lack of political will from our leader to enhance the Per capita income(LOGPCI) of the citizens in the country. The finding of the study is in line with (Adekunle, 2019).

CONCLUSION AND RECOMMENDATIONS

Over the years, successive governments in Nigeria have evolved various measures, policies, and establishment of anti-graft agencies such as the Economic and Financial Crime Commission (EFCC) and Independent Corrupt and Practice Commission (ICPC) to combat the menace of treasury looting by past leaders but with little or nothing to show in the country in term of economic development (Essien, 2017). For some years now, the Nigerian government have continued to recover funds from past and present officeholders in the country that were stashed in foreign accounts, which are assumed to have constituted poor economic development in the country. These activities by public office holders in the country have made it difficult for Nigerians to enjoy the dividends of democracy and, indeed, the gifts of nature with which the country is greatly and abundantly endowed. Hence, the study examines the impact of fund recovery corrupt public holders on human capital development in Nigeria. The finding of the study revealed that recovery from corrupt public holders has a positive but insignificant impact on per capita income in Nigeria, and fund recovery from corrupt public holders led to a corresponding increase in per capita income (LOGPCI).

In conclusion, the practical application of funds recovered can enhance human capital development in Nigeria. Therefore, the study recommended that the government should ensure that funds recovered from public officeholders in the country have been put to good use to enhance per capita income in Nigeria.

Also, the government should implement a policy to ensure that funds recovered from public officeholders are not re-rooted in the country for any reason.

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APPENDIX

Year	Fund Recovery Corrupt Public Holders (LOGFRCP)	Per Capita Income (LOGPCI)	Human Capital Index (HCI)
2000	2.113943	1.463893	0.33161
2001	2.079181	1.434569	0.33442
2002	2.69897	1.450249	0.33161
2003	3.173186	1.401401	0.34486
2004	3.660865	1.394452	0.33536
2005	3.176091	1.444045	0.32883
2006	3.591065	1.472756	0.32148
2007	3.672098	1.469822	0.31876
2008	2.68752	1.481443	0.31515
2009	2.783982	1.567026	0.31515
2010	3.519425	1.546543	0.31695
2011	2.026656	1.546543	0.30627
2012	1.995986	1.519828	0.29073
2013	1.202488	1.519828	0.28483
2014	1.882126	1.532754	0.28067
2015	1.963693	1.541579	0.27819
2016	2.859727	1.575188	0.27572
2017	2.508004	1.58995	0.27491
2018	2.025511	1.595496	0.27246
2019	2.897193	1.60206	0.26841
2020	2.080338	1.60206	0.26841
2021	2.756027	1.634477	0.27165
2022	2.857453	1.654177	0.27246

Source: Central Bank of Nigeria Statistical Bulletin, 2022.

DEFERRED TAX AND FINANCIAL PERFORMANCE OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

Obizuo, C. J., Nmesirionye, J. A., Okoro, C.C. and Nwawuru, C. C.
Department of Accounting, Michael Okpara University of Agriculture, Umudike, Nigeria
Corresponding author: obizuo.chiwendu@mouau.edu.ng

ABSTRACT
This study examined the effect of deferred tax on the financial performance of listed consumer goods firms in Nigeria from 2012 to 2021. The study employed ex post facto research design. The study used secondary data from the published financial annual reports of the five (5) selected listed consumer goods firms in Nigeria. The secondary data obtained were analyzed using simple regression analysis. The result indicated that deferred tax has a positive but insignificant impact on the return on assets of listed consumer goods firms in Nigeria. The findings also revealed that deferred tax has a positive but insignificant impact on the return on equity of listed consumer goods firms in Nigeria. Finally, the study revealed that deferred tax positively and significantly impacts earnings per share of listed consumer goods firms in Nigeria. Therefore, the study recommends that firms in Nigeria make tax planning part of their strategic financial planning and employ the service of expertise in tax practices due to the complexity and dynamism of Nigerian tax laws. This would help in enhancing their performance.
Keywords: Deferred tax, return on asset, return on equity, earnings per share, consumer goods firms

INTRODUCTION
A corporate tax manager's most significant responsibility is finding methods to reduce a company's overall tax liability. Theoretically, a company's profitability and tax burden are connected; achieving wealth maximization through different means of boosting profitability increases pressure on its ability to minimize its tax bill. According to Scholes *et al.* (2009), effective tax planning maximizes the firm's estimated discounted after-tax cash flows. In addition to profoundly understanding tax regulations, tax advisors should be familiar with any firm's history and day-to-day operations. It entails coordinating partners with conflicting interests and information in addition to local and international activities across several business divisions, including technology, management, finance, and financial reporting (Maydew & Shackelford, 2005).
According to Morien (2008), paying taxes in business is a given in well-organized economies. Effective tax planning techniques benefit the firm in terms of generating wealth. As a result, tax planning is a component of a company's overall financial planning, which also has to cover the company's financing, wealth-building, and investment plans (Fowokan, 2009). Accounting theory remains steadfast in evaluating deferred tax's value in creating tax plans meant to lessen the adverse impact of unpaid income taxes on companies' bottom lines (Citron, 2014). According to Ogundajo and Onakoya (2016), deferred tax has a unique history, development, and experience in Nigeria, yet it is an essential component of contemporary financial reporting. According to Ogundayo and Onakoya (2016), the deferred tax was first introduced in Nigerian firm accounting reports in the early 1990s. However, it was not until Nigeria adopted the International Accounting Standard Board (IAS) financial reporting standards that the public accounting community began to recognize it. The deferred tax has since been mandated for all accounting firms that are obligated to publish financial accounts in the entire format. The deferred tax accounting methodology was first implemented in Nigeria at this time. According to Ogundayo and Onakoya (2016), deferred tax accounting minimizes accounting profit or loss distortions caused by the impact of differing tax circumstances for the inclusion of accounting expenses or revenues to the income tax base.
The result is a deferred tax liability that can be used in the future. The distribution of profit portions not subject to required income tax to profit funds or among shareholders would be restricted due to the creation of this source credited on the deferred tax expenditure in the current period. The deferred tax asset, which is exceptionally accounted for if there is a sufficiently significant tax base in the future against which this asset might be utilized, is not considered in the contribution's subsequent paragraph. Given this, the ideas and practices about incorporating deferred tax accounting into a business's tax strategy are immeasurable. Therefore, further research is necessary to completely comprehend the connection between deferred tax and business financial performance, particularly concerning Nigeria. Even though deferred tax has been the focus of several studies, it is still unknown how it affects firms' financial performance.
However, the primary goal of this research is to examine the impact of deferred tax accounting on the financial performance of listed consumer goods firms in Nigeria.

Corporate managers have encountered difficulties concerning their companies' effective corporate tax rates and payments. Tax planners and company managers are concerned about the issue of tax rates and payment, which has primarily resulted in litigation. In other circumstances, companies are forced to employ tax deferral, which eventually leaves the company liable. Because of this fundamental corporate tax issue, several authors have examined deferred tax and firm financial performance studies.

Instead of looking at how this approach affects organizations' financial performance, previous research on deferred tax has focused chiefly on discrepancies in the reporting and disclosure of deferred tax. Research conducted by Murdoch et al. (2015) indicated that, for about 40% of businesses over all three prediction horizons, deferred income tax cost improves the capacity of current income tax expense to predict future tax payments. These studies employed time series data from Compustat enterprises in North America. Another empirical study by Bauman (2016) on how American Accounting Law and International Financial Reporting Standards are applied among publicly traded US companies discovered that classifying all deferred taxes as noncurrent (non-due) could have a negative impact on equity investors' ability to use the financial statements. Furthermore, Žárová (2016) researched the Czech Republic to examine deferred tax disclosure. The study evaluated the deferred tax items identified in the balance sheets of fifteen chosen firms listed and registered on the Prague Stock Exchange (PSE). Similarly, Purina (2016) investigated how national legislation affected deferred tax on many Czech and Russian enterprises and the outcomes of those effects. Since the developed economy has been the focus of these academics' research, we would want to investigate if the results from an emerging nation would be similar to those from the established sector by conducting our study from the perspective of Nigerian listed firms.

The majority of prior studies have focused on variations in deferred tax reporting. This research highlights the complexity of the conditions necessary for an organization to be financially successful in the broader context. In order to close the gap between the disparate conclusions reached by earlier authors, this study will investigate the impact of deferred tax liability in return on assets, return on equity, and earnings per share of listed consumer goods firms in Nigeria in accordance with the various theories and concepts of deferred tax.

LITERATURE REVIEW

The Concept of Deferred Tax

A deferred tax is one idea that's employed in financial reporting. According to Poterba *et al*. (2007), deferred tax accounting aims to consider any future tax consequences of recognition and measurement requirements versus tax laws that deviate from various accounting standards. Therefore, deferred taxes are the future tax consequences of items and activities included in the tax report but not in the financial statement. More precisely, deferred taxes would become payable or receivable if the entity's assets and obligations were recovered or settled at their present carrying value (Hanlon, 2005). The aim of deferred tax accounting is to apply the matching principle to recognize an item's tax implications in the same accounting period, as shown in financial statements, (Ogbodo *et al*., 2017). Consequently, the total tax cost represents the taxes paid or advantages obtained from pre-tax book revenue that are not included in current tax expense for the period. We can record the actual income tax expense that is in line with accounting expenditures and revenues by accounting for the deferred tax or growing due income tax (without payment obligations at the time of computation) (Graham & Leary, 2011).

This real recorded income tax charge will be included in the profit or loss after taxes, affecting the equity amount. Annual changes in temporary differences are utilized to indirectly adjust equity since this indirect effect is documented throughout the deferred tax accounting procedure. In addition to the previously described direct impact of deferred tax on equity, there are further situations when deferred tax is directly applied against equity. One such situation is when companies reevaluate their commitments and securities or assets (Lisowky, 2010). This is the outcome of their revaluation's accounting technique, which includes valuing other securities on the balance sheet at fair value and making a straight adjustment to equity. It also clarifies why, instead of being debited to costs, the deferred tax due is applied directly against equity items.

Peterson (2009) states that in the case of changes, a similar process must be followed each time it becomes essential to reassess assets and liabilities. With limited exceptions, we will not consider deferred tax liabilities since Nigerian law cannot be used to revalue agreements. The acquiring firm records profits and losses from revaluation during business company transitions as a distinct equity item, which is the difference between the revalued asset's accounting and fair value. On the other hand, tax neutrality is required by law during transitions. The legal successor will continue to use the carrying value of the transferred assets as the tax basis for determining the required income tax due on the assets acquired in this way.

The future tax burden is likely more significant when the expert's evaluation of the assets exceeds the carrying amount or the equity value (Hanlon, 2005). However, since this effect cannot be represented in

due income tax (the requirement to preserve tax neutrality), the deferred tax arising from the discrepancy between the tax base and the valued asset by the expert must be managed. According to Nigerian legislation, this deferred tax may or may not be based on a reasonable value of each component of the assets.

Deferred Tax Liability

IAS 12 (Income-Tax Accounting) accounting for deferred tax uses the liability approach of deferred tax accounting; nevertheless, comprehensive income tax accounting has not yet been included in IFRS standards (Halim *et al*., 2015). Deferred tax accounting, then, accounts for the amounts of income taxes that are payable (recoverable) in later periods as a result of transient book-tax differences, that is, differences between the book value and tax base of an asset or liability that will result in taxable amounts when the asset or liability's book value is recovered. According to Haskins and Simko (2011), financially recorded revenue that has not been taxed yet usually results in deferred tax obligations. This may be observed in accelerated tax depreciation, when tax depreciation rates surpass book depreciation rates, hence deferring taxable revenue. On the other hand, deferred tax assets are typically the result of early expensing for financial accounting goals rather than tax considerations (Chang et al., 2009). The amount of income taxes due in subsequent periods connected to transitory disparities are known as deferred tax obligations. Thus, book-tax differences that emerge naturally from the disparities between tax legislation and accounting standards and book-tax differences that provide information about book-tax decisions taken as a result can be reflected in deferred tax components (Ayers *et al*., 2009).

According to Savka and Radojko (2013), deferred tax obligations are only documented for temporary differences that might result in taxable amounts following accounting periods. A temporary difference will exist between the reported amount and the tax basis of an installment sale receivable if, for tax purposes, some or all of the gain on the installment sale will be included in the determination of taxable income in future years because amounts received up to that point will be included in the determination of taxable income in future years, for example. Also, although these liabilities usually are not crucial for tax reasons until due amounts are fully set, provisions are recorded under IAS 37 for liabilities with an unknown time or amount. This raises the issue of provisional book-tax disparities indicative of permanent discrepancies between accounting standards and tax legislation.

In their study on deferred tax disclosure, Ogundayo and Onakoya (2016) discovered that the primary suppliers of deferred tax in Nigeria are manufacturing companies, some of which are consumer products listed on the Nigerian stock exchange. When there are transitory discrepancies at the reporting date between the tax bases of assets and liabilities and their carrying values for financial reporting, deferred tax is given using the liability method. These consumer goods firms also use the balance sheet liability approach to determine deferred tax assets and liabilities concerning transitory variations. At every reporting date, the carrying amount of these firms' deferred tax obligation is examined and lowered to the extent that it is no longer expected that enough taxable profit will be generated to permit the use of all or a portion of the deferred income tax asset. This data is derived from examining the financial records of publicly traded consumer products companies in Nigeria. Only when it is probable that taxable earnings will be available to realize the deferred tax asset or when it may be used to offset current deferred tax obligations are deferred tax assets recorded. Deferred tax assets that have not been recognized are examined at each reporting date and recorded to the extent that it is possible—though not always—that future taxable profit will enable the deferred tax asset to be recovered. According to Citron (2014), deferred tax liabilities are recognized for all taxable temporary differences, except situations in which the liabilities result from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and does not affect the accounting profit or the taxable profit or loss at the time of the transaction. In these situations, deferred tax liabilities are offset if there is only a legally enforceable right to set off current tax assets against current income tax liabilities, and the deferred taxes are related to the same taxable entity and the same taxing authority.

Deferred Tax and Firms Financial Performance

Financial performance is defined by Olaoye and Bamisaye (2018) as the methodical application of scientific procedures to ascertain a company's profitability, liquidity, and returns to shareholders. Financial performance studies are gaining popularity among academics studying business worldwide (Johnson, 2010). Financial performance theories and studies have also caught the attention of business dealers and practitioners worldwide because financial performance is a standard indicator of a firm's high performance. After all, it reflects the firm's effectiveness and efficiency in utilizing available resources (Miller & Skinner, 1988). Accordingly, financial success results from an activity and the right metric for assessing corporate performance has been chosen based on the type of business to be assessed and the goals the evaluation must achieve (Gordon & Joos, 2004).

The majority of deferred taxes are not anticipated to be realized shortly due to business activity, according to opponents of the deferred tax obligation perspective (Weber, 2009), among other claims. Consequently,

all temporary disparities and the related tax revenue flow should be reversed permanently under some delaying circumstances. Newly created temporary differences in the same business year balance out frequently performed business processes and one reversing temporary difference (Burgstahler *et al*., 2002). Furthermore, there is uncertainty regarding the timing of the relevant tax cash flow and the dependability of projected tax payments and tax advantages because realizing these cash flows depends on the company's development and future operations. If significant portions of the temporary differences reverse due to periodic cessation of operations, the corporation will almost certainly suffer negative financial gains. This implies that poor financial performance will make paying down accumulated tax obligations impossible.

There are contradictory empirical data regarding financial statement users' consideration of deferred tax information. Burgstahler *et al*. (2002) found that when the corporation tax rate increases, deferred tax adjustments are reflected in share prices at the same pace as recurring earnings, although having differing consequences for future cash flows. Because of their analysis, investors were unprepared for the income effects of tax rate changes brought on by deferred tax adjustments. This suggests that investors are either not familiar with deferred tax accounting norms or are not aware of deferred taxes at all (Plumlee, 2003).

The liability model is used by both US GAAP and IFRS, which classify assets and deferred tax obligations as liabilities (assets). Income taxes due (recoverable) in subsequent periods arising from transitory book-tax disparities, or variations between an asset or liability's book value and its tax base, are classified as deferred tax liabilities (deferred tax assets), according to IAS 12.5. When the book value of the liability (asset) is resolved (recovered), these discrepancies will provide taxable (tax-deductible) amounts. (31) Deferred tax obligations may arise from previously recorded but untaxed revenue or accelerated tax depreciation. In some instances, deferred tax assets are recorded when the tax benefits of carry forwards of tax loss are anticipated, such as provisions for warranty expenditures or bad debts that have previously been expensed for accounting purposes but are not tax deductible until the provision is used.

Opponents of the liability perspective have argued that, in part, the majority of deferred taxes are the consequence of operational operations that are periodically repeated, making it unlikely that they would be recovered anytime soon. Consequently, the reversal of the aggregate temporary differences and the related tax revenue flow is postponed forever since a single reversing temporary difference is compensated by newly produced temporary differences in the same fiscal year. Furthermore, there is uncertainty regarding the timing of the relevant tax cash flow and the dependability of projected tax payments and tax advantages because realizing these cash flows depends on the company's development and future operations. If large percentages of the temporary differences reverse due to the normal operational operations ceasing, the firm will likely face severe financial difficulties. Because there is insufficient taxable revenue (cash input), accumulated tax advantages (tax liabilities) cannot be used or paid.

Consequently, deferred tax cash flow will not be realized even if the temporary discrepancies reverse. Because of these factors, proponents of the equity perspective assert that most cash flows related to deferred taxes are remote and unpredictable in several ways, having a present value that is very near to zero and having little to no impact on the total amount of taxes that must be paid in the future. According to this reasoning, deferred taxes are fundamentally a part of fairness.

Theoretical Framework

The Ability to Pay Theory

In 1776, Adams Smith claimed that taxes are based on residents' ability to pay, not on any quid pro quo. Individuals and companies view taxes as a sacrifice, and they disagree on the type and degree of sacrifice each taxpayer should make. A proportional sacrifice equal to the whole amount of utility lost as a result of taxes should be made by each taxpayer. According to Visvanathan (1998), an equivalent utility adjustment to taxes must be performed if there is an immediate loss of utility due to taxation incompatible with the derivative of the utility function. As a result, companies that pay taxes can legally resolve arbitrary tax discrepancies by applying the ability to pay theory. This will allow them to achieve equal tax utilization status and resolve tax inequities through delayed tax computation (Ball & Shivakuman, 2005).

Equal sacrifice: The overall utility taxpayers receive from taxes should be reduced equally for each taxpayer. Equitable proportional sacrifice: Each taxpayer should experience a uniform utility reduction due to taxation. Equal marginal sacrifice: Every taxpayer should suffer an equal and instantaneous loss of utility due to taxation, according to the derivative of the utility function. As a result, there will be minimal overall sacrifice—that is, minimal overall sacrifice.

The cannons of taxation lend validity to this thesis, emphasizing the contributor's ability to contribute to the familiar pulse of the State in the most convenient time and method. Taxes to the state are levied without consideration (Chigbu *et al*. 2012).

The Modigliani and Miller (MM) Irrelevancy Theory

The Modigliani and Miller (MM) irrelevancy thesis was born from their groundbreaking research in 1958. According to this study, "the value of a corporation is unaffected by how that it is financed under a given

market price process (the classical random walk), in the absence of taxes, bankruptcy costs, agency costs, and asymmetric knowledge, and in an efficient market." They added that it makes no difference how the business earns money—through the sale of loans or the issuing of shares—or what its dividend policy is. This hypothesis supports the net operating income (NOI) approach to corporate valuation by stating that the firm's capital structure and tax policies do not influence the total cost of capital. Modigliani and Miller amend the definition of tax sheltering in 1963 about corporate taxes. They argued that since debt reduces the amount of taxes owed, a company's ideal capital structure should be 100% debt. In theory, the MM model makes sense, but replacing debt with equity in practice results in higher taxes and bankruptcy costs (Brigham & Gapensuio, 1984).

Empirical Review

Nwaorgu *et al*. (2019) examined the impact of deferred tax accounting on the financial performance of agricultural enterprises listed in Nigeria was investigated. Utilizing an ex post facto research methodology, data for the study came from four publicly traded farm firms. A straightforward linear regression was used to analyze the seven-year data set from 2011 to 2017. The findings demonstrate that the cash flow and earnings per share of listed agricultural enterprises in Nigeria are favorably and considerably impacted by deferred tax accounting. Due to the complexity of deferred tax accounting regulations, Nigerian firms should utilize effective accounting practices to incorporate tax planning into their strategic financial planning. The results of the study formed the basis for this recommendation. Kyriazopoulus *et al.* (2019) examined how delayed taxes affected bank profitability and capital adequacy. The Greek banking industry provides the evidence. Data from four Greek national banks between 2014 and 2018 were examined in the study. According to the study, Greek banks are disproportionately impacted by delayed taxes, which may affect their business model and capacity to support the expansion of the Greek economy. Olaoya and Bamisaya (2018) investigated the relationship between deferred tax and financial performance of Nigerian firms, looking at the effects of both deferred tax assets and deferred tax liabilities on firm performance as measured by profit after tax, earnings per share, return on assets, and return on equity. Using panel-based estimating techniques, they examined data from 10 listed companies on the Nigerian stock exchange market. The researchers discovered that deferred tax assets and liabilities harm the profitability of the companies they studied. The impact of accounting data on deferred taxes in Nigeria was examined by Udeh and Ezejiofor (2018), who specifically focused on deposit money institutions. Using the ex post facto study technique, data were gathered from Nigerian deposit money institutions' annual reports and accounts. Pooled multiple regression analysis was the method we utilized to evaluate the theories. The study shows that earnings per share (EPS) and cash flow (CF) have a negative effect on deferred tax.

Viola and Katherina (2017) researched to fill a vacuum in the literature on the disclosure of relevant deferred tax value in accounting under a merger in connection with the valuation of the participating enterprises. They used the analytical techniques of description, synthesis, and comparison. Using a different technique, they found that their model indicated the presence of a possible deferred tax accounting solution and its effect on asset value. They also found that the original balance sheet's failure to disclose deferred tax may have a detrimental effect on the acquiring company's capacity to make wise financial decisions. Arjan and Ewourt (2017) investigated the conceptual problems with the current accounting for deferred taxes and proposed solutions derived from the literature to make the value of the IFRS deferred tax numbers meaningful. The empirical data about the value relevance of deferred taxes should be considered while developing accounting rules. We conclude that the only differences that qualify as deferred taxes are those that are temporary and will result in actual future tax payments and collections. The valuation adjustment approach should be used to account for temporary disparities for which the tax cash flow has already occurred because they affect the valuation of the underlying asset or obligation. Furthermore, partial allocation, rather than total allocation, should be used better to match deferred taxes with projected future cash flows, increasing their relevance and understandability. We conclude that deferred tax balances should be evaluated at a lower cost to consider time value. Ogundajo and Onakoya (2016) examined the effect of corporate tax planning on the financial performance of manufacturing enterprises stated on the Nigerian Stock Exchange using the annual reports and accounts of 10 selected companies out of the twenty-eight listed within the consumer goods sector. The study employed the Generalized Least Square (GLS) regression technique, which was determined by analyzing the Hausman's model estimate test results. According to the report, Nigerian businesses have not fully embraced aggressive tax planning techniques such as thin capitalization, tax law incentives, and other benefits of legal loopholes in the country's tax code. The study recommended manufacturing firms operating in Nigeria to employ tax experts, integrate tax planning into their strategic financial planning, and utilize all available tax planning techniques to enhance their financial performance, given the intricate and ever-changing nature of Nigerian tax laws.

In addition, James *et al*. (2011) investigated deferred tax positions and incentives for firm activities addressing corporate tax changes from one tax regime to another. They examined the potential effects of

these positions on company activity before and after a pre-announced adjustment in the statutory corporation tax rate by compiling disaggregated deferred tax position data for a sample of big U.S. firms between 1993 and 2004. According to their findings, there is a significant degree of variance in the short-term impacts of changes in the tax rate on reported earnings due to major American firms' diverse deferred tax situations. They suggested that it is critical to acknowledge these distinct motivations to comprehend the political economics of corporation tax reform. In order to make the value of IFRS deferred tax figures relevant, Ovtchinnikov (2010) examined the conceptual issues with current accounting for deferred taxes and offered remedies drawn from the literature. Creating accounting standards should incorporate the empirical findings about the value relevance of deferred taxes. We conclude that only transitory differences that will lead to future tax payments and collections should be classified as deferred taxes. Temporary discrepancies for which the tax cash flow has already happened should be accounted for using the valuation adjustment technique as they have consequences for the valuation of the underlying asset or liability. In addition, partial allocation should replace complete allocation to improve the relevance and understandability of deferred taxes by better aligning them with anticipated future cash flows. Ultimately, in order to account for time value, deferred tax balances ought to be valued at a lower cost. The data in net deferred tax assets/liabilities (NDTA/L), available in Compustat and displayed on the balance sheet, was proposed to be used by Halon and Heitzman (2010). The NDTA/L directly measures future expected tax payment changes that will likely affect the firm's future marginal tax rate. This study looks at the link between the NDTA/L, a composite measure of temporary non-debt tax benefits and obligations, and debt policy, financing decisions businesses make. From 1994 to 2008, 37% of the observations in a sample of public U.S. companies had an NDTA/L. The results demonstrate that enterprises with NDTA have lower leverage ratios following a refinancing and are significantly less likely to issue debt at a refinancing point, which supports the substitution argument. Similarly, firms with NDTL are more likely to issue debt and have higher leverage after a refinancing. The NDTA/L helps alleviate the problem of identifying individual non-debt tax shields because it bundles the probable net tax effects of temporary book-tax differences.

METHODOLOGY

This study adopts ex-post facto research design. Ex-post facto research design entails ascertaining the influence of previous elements on the current happening or event.

The population comprises the 21 listed consumer goods firms on the Nigerian exchange group from 2012 to 2021. The following companies were considered for this study: Nigeria Breweries, Cadbury Plc, Guinness Plc, Nestle Plc, and Unilever Plc.

The simple linear least square regression (OLS) method was adopted to investigate the relationship between the dependent and independent variables.

Model Specification

This study formulates the following model to be used by the researcher in the investigation.

$ROA_{it} = \alpha + \beta_1 DTAX_{it} + U_{it}$

$ROE_{it} = \alpha + \beta_1 DTAX_{it} + U_{it}$

$EPS_{it} = \alpha + \beta_1 DTAX_{it} + U_{it}$

Where;

α = Constant

ROA = return on asset (profit after tax divided by net asset)

ROE = return on equity (profit after tax divided by shareholders fund)

EPS = Reported Earnings per share of the firm at a time

DTAX = Deferred Tax Liability

it= Cross-sectional ($_i$) time ($_T$)

U = Error term used in the model.

β_1 = Beta coefficient of the independent variable.

Decision Rule: Accept the null hypothesis if the calculated value is greater than the significant level of 0.05.

RESULTS AND DISCUSSIONS

Data Presentation

The study focused on deferred tax implication on the performance of firms in Nigeria: evidence from listed consumer firms in Nigeria. Deferred tax liability was used as an independent variable while return on asset (ROA), return on equity (ROE) and earnings per share (EPS) were used as proxies for the dependent variable (performance).

Descriptive Statistics

The descriptive statistics for both the dependent and independent variables are presented in the table below;

Table 1: Descriptive statistics

	ROA	ROE	EPS	LOGDEFTAX
Mean	0.086600	0.297000	1.766600	6.640070
Median	0.070000	0.170000	1.215000	6.873601
Maximum	0.260000	1.870000	6.000000	7.503989
Minimum	0.010000	0.020000	0.080000	5.056863
Std. Dev.	0.069886	0.359383	1.612190	0.701133
Skewness	1.004637	2.446804	1.168482	-0.752142
Kurtosis	3.018774	9.738913	3.450268	2.333486
Jarque-Bera	8.411526	144.5007	11.80030	5.639819
Probability	0.014909	0.000000	0.002739	0.059611
Sum	4.330000	14.85000	88.33000	332.0035
Sum Sq. Dev.	0.239322	6.328650	127.3587	24.08781
Observations	50	50	50	50

Source: E-View Output generation

Table 1 presents the descriptive statistics of all the variables. N represents the number of observations; therefore, the number of observations for the study is 50. Return on asset (ROA) has a mean of 0.086600with a deviation of 0.069886. Also, ROA reveals a maximum and minimum value of 0.260000and 0.010000. The result also reveals that Return on equity (ROE) reflects a mean of 0.297000 with a deviation of 0.359383. ROE also revealed a maximum value of 1.870000 and a minimum value of 0.020000. The Table also illustrates that Earnings per share (EPS) has a mean of 1.766600 with a standard deviation of 1.612190. EPS reveals a maximum value of 6.000000 and a minimum value of 0.080000. Lastly, the result revealed that Deferred tax (LOGDEFTAX) has a mean of 6.640070with a deviation of 0.701133. Also, DEFTAX reveals a maximum and minimum value of 7.503989and 5.056863

Normality of the variables was examined using the skewness, kurtosis, Jarques-Bera, and probability statistics. According to Kline (2011), the univariate normality of variables can be assumed if the skewness statistic is within the interval (-3.0, 3.0) The data set for all the variables reveal skewness statistic values that are between the range of approximately -3 and +3 which means that all the data values are within the accepted skewness range for normality.

Regression Analysis

Table 2: Impact of deferred tax on return on asset

Dependent Variable: ROA
Method: Least Squares
Date: 09/01/22 Time: 16:38
Sample: 1 50
Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.076020	0.093107	-0.816475	0.4183
LOGDEFTAX	0.024491	0.013946	1.756102	0.0855

R-squared	0.060369	Mean dependent var	0.086600
Adjusted R-squared	0.040794	S.D. dependent var	0.069886
S.E. of regression	0.068446	Akaike info criterion	-2.486360
Sum squared resid	0.224874	Schwarz criterion	-2.409879
Log-likelihood	64.15899	Hannan-Quinncriter.	-2.457235
F-statistic	3.083893	Durbin-Watson stat	0.686632
Prob(F-statistic)	0.085450		

The table 2 above shows the regression results on the impact of deferred tax on return on asset of consumer goods firms in Nigeria.

The result of objective one showed that deferred tax has R^2 of 0.060 on return on asset (ROA), which implies that a 6.0 total variation in ROA is explained by deferred tax. It has a coefficient of 0.024491, which implies that a 1 percent increase in deferred tax would lead to a 0.024491 increase in the ROA of consumer goods firms in Nigeria. Since the probability of F-statistics (0.085) is more significant than 0.05, it implies that deferred tax has a positive but insignificant impact on the return on assets of listed consumer goods firms in Nigeria. The finding is contrary to the findings of Olaoya and Bamisaya (2018), who studied the effect of deferred tax and the financial performance of firms in Nigeria by analyzing the effect of both deferred tax assets and deferred tax liability on firm performance measured in terms of profit after tax, earnings per share, return on asset and return on equity. They found that deferred tax assets and tax liability negatively impact the performance of the firms sampled in the study.

Table 3: Impact of deferred tax on return on equity

Dependent Variable: ROE
Method: Least Squares
Date: 09/01/22 Time: 16:40
Sample: 1 50
Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.522454	0.479404	-1.089799	0.2812
LOGDEFTAX	0.123410	0.071807	1.718632	0.0921

R-squared	0.057968	Mean dependent var	0.297000
Adjusted R-squared	0.038343	S.D. dependent var	0.359383
S.E. of regression	0.352426	Akaike info criterion	0.791225
Sum squared resid	5.961789	Schwarz criterion	0.867706
Log-likelihood	-17.78062	Hannan-Quinncriter.	0.820349
F-statistic	2.953694	Durbin-Watson stat	0.609370
Prob(F-statistic)	0.092126		

Table 3 above shows the regression results on the impact of deferred tax on the return on equity of consumer goods firms in Nigeria.

The result of the objective one showed that deferred tax have R^2 of 0.058 on return on equity (ROE), which implies that 5.8 total variations in ROE is explained by the deferred tax. It has a coefficient of 0.123410 which implies that 1 percent increase in deferred tax would lead to 0.123410increase in the ROE of consumer goods firms in Nigeria. Since the probability of F-statistics (0.092) is greater than 0.05, it implies that deferred tax has positive but insignificant impact on return on equity of listed consumer goods firms in Nigeria. The finding is in contrary to the findings of Olaoya and Bamisaya(2018) that studied the effect of deferred tax and financial performance of firms in Nigeria by analyzing the effect of both deferred tax asset and deferred tax liability on firm performance measured in terms of profit after tax, earnings per share, return on asset and return on equity. They found out that deferred tax assets andtax liability negatively impact on the performance of firms sampled in the study.

Table 4: Impact of deferred tax on earnings per share

Dependent Variable: EPS
Method: Least Squares
Date: 09/01/22 Time: 16:40
Sample: 1 50
Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.390503	2.085562	-1.625702	0.1106
LOGDEFTAX	0.776664	0.312385	2.486237	0.0164

R-squared	0.114087	Mean dependent var	1.766600
Adjusted R-squared	0.095630	S.D. dependent var	1.612190
S.E. of regression	1.533167	Akaike info criterion	3.731726
Sum squared resid	112.8288	Schwarz criterion	3.808206
Log-likelihood	-91.29314	Hannan-Quinncriter.	3.760850
F-statistic	6.181373	Durbin-Watson stat	0.559663
Prob(F-statistic)	0.016443		

The table 4 above shows the impact of deferred tax on earnings per share of consumer goods firms in Nigeria.

The result showed that R^2 has a value of 0.114, which implies that an 11.4 percent variation in EPS is explained or caused by the deferred tax. The coefficient of 0.776664 implies that a 1 percent change in deferred tax would lead to a 0.776664 change in the EPS of consumer goods firms in Nigeria. Since the probability of F-statistics (0.016) is less than 0.05, it implies that deferred tax has a positive and significant impact on earnings per share of listed consumer goods firms in Nigeria. The finding is consistent with the findings of Nwaorgu et al. (2019), who examined the effect of deferred tax accounting on the financial performance of listed agricultural firms in Nigeria. Their findings revealed that deferred tax accounting has a positive and significant effect on both cash flow and earnings per share of the listed agricultural firms in Nigeria.

CONCLUSION AND RECOMMENDATION

This study was carried out with the broad objective of examining the implication of deferred tax on the performance of firms in Nigeria. There is no question in accounting theory regarding the significance of deferred tax when creating tax plans, which aim to offset the impact of unpaid income taxes on businesses' financial performance. The matching principle's result, known as deferred tax, recognizes the tax implications of an item reported in the financial statement within the same accounting period as the item itself. A deferred tax liability is formed as a source for the future application. The distribution of the portions of profit that were not subject to required income tax to funds generated from the profit or among shareholders would be limited due to the formation of this source credited on the deferred tax expenditure in the current period. However, the study concludes that deferred tax has a positive but insignificant impact on the return on assets and return on equity of firms in Nigeria but has both positive and significant impacts on earnings per share of firms in Nigeria.

In consonance with this study's findings, it is recommended that:

Due to the complexity and severity of Nigerian tax regulations, businesses in that country should incorporate tax planning into their strategic financial planning. By doing so, they will be able to perform better.

To further improve financial performance, businesses should make appropriate use of all-inclusive tax planning solutions.

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EFFECT OF CORPORATE ATTRIBUTES ON FINANCIAL PERFORMANCE OF LISTED CONSUMER GOODS MANUFACTURING FIRMS IN NIGERIA

Eke, Onyekachi A., Nwosu, Stanley U. and Ogbonnaya, Victor O.
Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria
Corresponding author:ekeabaa@gmail.com

ABSTRACT
The study examined the effect of corporate attributes on the financial performance of listed consumer goods manufacturing firms in Nigeria. An ex-post facto research design was adopted to achieve the study's objectives. The study population comprised 21 listed consumer goods manufacturing firms from 2017-2021. Data were analyzed with panel regression after running the necessary preliminary test. The findings revealed that corporate attributes (firm size, leverage, liquidity, and operating expenses) significantly affect profit after tax and return on assets of listed consumer goods manufacturing firms in Nigeria, except for return on equity, where it has no significant effect. The study concluded that corporate attributes of firm size, leverage, liquidity, and operating expenses are fundamental to the financial performance of listed consumer goods manufacturing firms in Nigeria. The study, therefore, recommended that the management of listed consumer goods manufacturing firms in Nigeria should endeavor to grow their firm size via product innovations and improvements, increase the level of leverage in their capital structure, maintain adequate liquidity position as well as control their operating expenses towards productive ventures for better financial performance.
Keywords: corporate attributes, profit after tax, return on equity, return on asset.

INTRODUCTION
Business entities are associated with specific corporate attributes and governance mechanisms that positively or negatively impact their performance. Corporate attributes include firm size, leverage, liquidity, capital, firm age, dividend, market share, off-balance sheet activities, and operating expenses, among others that affect a firm's operations. It is concerned with the ability of firms to source funds to be used as capital to finance their operations and settle their short-term financial obligations as at when due using their current assets in order to gain the confidence of creditors and other lenders of funds as well as minimization of operating expenses for performance improvement.
Firm attributes refer to firm characteristics or specific features that distinguish one company from another. Firm attributes are numerous; it could be the size, profitability, leverage, industry type, geographical location, nature of the business, corporate governance mechanism, and any other feature that distinguishes one company from the other. These features commonly influence company decisions and information disclosure as well as their performance (Dogan, 2013).
Most business entities use debt to finance their operations to improve their performance. By doing so, a company increases its leverage because it can invest in business operations without increasing its equity. Leverage is the amount of debt used to finance firms' assets and other capital expenditures that can improve firms' performance (Lin et al., 2006).
Tudose (2012) posits that leverages discipline managers, as the debt level may be used to monitor managers. Thus, increasing leverage components of a firm's capital structure may increase the level of efficiency and thereby increase their performance.
Company managers who can identify the level of leverage as a component of a firm's capital structure are rewarded by reducing the firm's cost of finance, thereby maximizing the firm's revenue (Zeitun & Tian, 2007). From the creditor's point of view, equity debt may help understand firms' risk management strategies and how firms determine the likelihood of default associated with firms financial performance.
Firm size is also expected to influence a firm's performance (Dogan, 2013). Large firms may exercise economies of scale, have good knowledge of markets, and can employ competent managers for better performance (Driffield et al., 2005). However, large firms can be less efficient than smaller ones because managers lose control over strategic and operational activities (Williamson, 1967 & Jensen, 1986). In addition, the amount of cash a company has at hand or can generate quickly reveals how healthy the company is financially. High levels of available cash indicate that the business can pay off debt quickly when due. The types of assets a company has, and the marketability of those assets are where a discussion of financial liquidity begins. Liquidity refers to the firm's ability to convert its current assets into cash to meet its day-to-day operations for better financial performance (Tatahi & Heshmati, 2009). Proper utilization of firms' liquidity can improve their financial performance.
Operating expenses are another item in a firm's financial statement that affects its financial performance. It is the amount of money a firm spends in running its business operations daily. A company's operating

expenses consist of costs of goods sold, selling, and general and administrative expenses that enable the company to carry out its production operations without stoppage. Operating expenses affect the financial performance of a firm either negatively or positively. If a firm spends its cash on operating expenses, its financial performance would be affected negatively. If a firm minimizes its operating cost by adequately managing it, its financial performance will increase positively.

All stakeholders must understand the relationship between corporate attributes and manufacturing sector performance. Studies have been conducted in different parts of the world on the role of firm attributes on corporate performance. One of the sectors that is gaining popularity is that of manufacturing. Thus, manufacturing firms must strengthen their operations and widen their scope of activities to improve financial performance and maximize shareholders' wealth. Because stakeholders are now interested in getting more insight into the activities of this subsector in Nigeria, it has become pertinent to undertake an empirical study to examine the effect of corporate attributes on the financial performance of listed consumer goods manufacturing firms in Nigeria.

The theoretical basis for arguing that firm characteristics are related to financial performance can be found in the traditional neoclassical view of the firm and the concept of economies of scale. Economies of scale may occur for various reasons such as financial, better interest rates and better discount rates to larger firms, organizational, specialization and division of labor, and technical, division of high fixed costs across large numbers of units. Thus, a positive relationship between firm size and profitability is expected. A negative relationship between firm size and profitability is noted in the alternative theories of the firm, which suggest that large firms come under the control of managers pursuing self-interested goals. Therefore, profit maximization as the firm's objective function may be replaced by the managerial utility maximization function. Studies on the effect of firm characteristics on firm performance have generated mixed results, ranging from those supporting a positive relationship to those opposing it. A positive relationship between firm size and performance was found by Vijayakumar and Tamizhselvan (2010). In their study, they used different measures of size (sales and total assets) and performance (profit margin and profit on total assets). Majumdar (1997) investigated the impact that firm size has on the profitability and productivity of a firm. While controlling for other variables that can influence firm performance, he found evidence that larger firms are less productive but more profitable. Despite the development of manufacturing companies, limited studies were conducted on how corporate attributes affect manufacturing firms' performance.

The determinants of performance have been studied in corporate finance literature for the last several decades, but none has been done on listed consumer goods manufacturing firms. The study relating to the relationship between corporate attributes and the financial performance of manufacturing firms in Nigeria provides important data for comparing determinants of manufacturing performance between developed and developing economies. In addition to the gap above, most of the studies on corporate attributes, particularly in Nigeria, did not include leverage as a proxy of firm attributes despite the strong relationship established in the literature between leverage and the financial performance of firms. This study is, therefore, the following corporate attributes – leverage, firm size, liquidity, and operating expenses on profit after tax, return on asset, and return on equity using consumer goods manufacturing firms as an attempt to fill all these literature gaps.

REVIEW OF LITERATURE

Corporate attributes

Corporate attributes (also known as firm characteristics) can be defined as the vast variety of information disclosed in the financial statements of business entities that serve as predictors of the firms' quality of accounting information and performance (Lang & Lundholm, 1993). Firm characteristics can also be defined as the behavioral patterns of a company's operation, enabling it to achieve its objectives throughout its operations. Also, firm characteristics refer to the various accounting information firms report in their financial statements for a particular accounting period, which can send a message to various stakeholders about their performance. A company's characteristics vary from one business entity to another. The company's characteristics can be determined based on the relevant information disclosed on its financial statements for a particular accounting period (Stainer, 2006).

Firm size: Firm size refers to the speed and extent of growth that is ideal for a specific company. Most companies intend to expand the size of their business operation for them to grow either in revenue, profit, number of employees, or size of facilities (Pervan & Visic, 2012).

Leverage: Leverage finance refers to funding a company or business entity with debt to improve the firm's financial performance. Leverage financing is commonly employed by a company to achieve a specific or

temporary objective, such as the acquisition of another business, to effect a buy-out, to purchase shares or fund a one-time dividend, or to invest in self-sustaining cash-generating assets (Pachori & Tatala, 2012).

Liquidity: A company's liquidity position is measured as a ratio of its current assets to current liabilities; it represents the possibility that a firm will be able to meet its financial obligations as fall due (Omolehinwa, 2006). Suppliers, creditors, and other short-term lenders of funds require a very sound liquidity position to have confidence in their ability to satisfy their requirements (Kurfi, 2003).

Operating expenses: Operating expenses are the costs associated with a company's principal operating activities, which are reported on its income statement. The expenses constitute the cost of goods sold, selling, general and administrative expenses (Zaman, 2009). Krishnan (2006) viewed operating expenses as a company's expenses for producing its goods and services. Paying employees' wages and funds allocated toward research and development are also part of operating expenses (Shil & Pramanik, 2012).

Financial performance: Firms' performance is vital for investors, stakeholders, and the economy. Investors are interested in the returns of their investments. Well-performing businesses can bring higher returns to their investors. A company's Financial performance will increase its employees' income, bring quality products to its customers, and become friendly to its operating environment (Mirza & Javed, 2013). A good-performing company can generate more profits, leading to future investment that provides employment opportunities and increases people's income.

Theoretical framework

Previous researchers have used different theories to underpin studies in this area. The study anchored explicitly on signaling theory.

Signaling theory is concerned with understanding why specific signals are reliable and others are not in terms of decision-making. The theory looks at the quality and reliability of accounting information sent by a company to its users of accounting information for investment decision-making by potential investors. Spence (1973) posited that a well-performing firm distinguishes itself from the nonperforming one by sending a credible signal about its performance to capital markets and potential investors. Signals a firm sends are the results of its operating activities, which would inform investors about the company's prospects. The theory assumes that managers and shareholders of a company differ in getting access to vital information about the firm operation. The managers can only access some information, while the shareholders do not have access to such information.

Signaling theory was adopted in this study to underpin firm characteristics represented by leverage, firm size, liquidity, and operating expenses because a company's sound liquidity position shows its ability to meet its short-term financial needs without stoppages in production. Also, effective cost management would enable a company to minimize its operating costs of production, thereby leading to an improvement in the firm's financial performance, which is showing an excellent signal to both current and potential investors that the company can continue to operate in line with the going concern concept of accounting as well as satisfying the interest of its stakeholders.

Empirical review

Different components of firm characteristics and governance mechanisms play a vital role in improving the performance of corporate entities in both developed and emerging countries. Noor and Fadzil (2013) studied the board characteristics and performance of Malaysian listed firms, and their findings showed a significant positive relationship between firm characteristics and organizational performance. Fooladi (2012) also investigated the impact of board characteristics on the performance of listed firms in Iran; the findings showed no significant relationship between firm size, leverage, managerial shareholdings, and firms' performance. Audit committees with more experienced and financially experienced members influence firm performance positively (Aldamen *et al.,* 2012). Mirza and Javed (2013) viewed performance as one of the organization's goals to maximize shareholders' wealth and generate enough profit to operate in line with the going concern concept of accounting.

Financial leverage represents the extent to which companies or investors use borrowed money to form part of their capital structure with the hope of better performance. Akhtar et al. (2012) also reported a positive significant relationship between leverage and the financial performance of listed fuel and energy companies in Pakistan. However, Magpayo (2011) conducted a study on the relationship between leverage and financial performance, using a sample of 1000 companies in the Philippines for the period of one year (2009), and found a negative significant impact between leverage and the financial performance of the sampled firms.

Sudiyatno *et al.* (2012) investigated company policy, firm performance, and firm value using a sample size of listed manufacturing firms in the Indonesian Stock Exchange from 2008 to 2010 and found a negative significant effect of leverage on the firm's financial performance. Their findings align with the findings of Salehi (2009), who researched the leverage and financial performance of some selected Iranian companies and found that leverage significantly negatively impacts firm performance. Earlier, Rayan (2008) documented that financial leverage adversely significantly affects a firm's financial performance. Firms

with low financial leverage tend to perform better than those with high. Yoon and Jang (2005) studied the effect of financial leverage on the profitability and risk of restaurant firms for the period of 1998 to 2003, using ordinary least square regression and found that firms that used equity in financing their operations performed better than those firms that used leverage to finance their operations. Damouri *et al.* (2013) studied the relationship between changes in the financial leverages and the values of the listed firms in the Tehran Stock Exchange, using a sample of 98 firms from 2001 to 2010. They used multivariate regression in analyzing their data, and their results showed no significant relationship between changes in the financial leverages and the financial performance of the selected firms.

Another empirical study conducted by Fosu (2013) on the relationship between capital structure and firm performance using panel data consisting of 257 South African companies from 1998 to 2009 showed that financial leverage has a positive and significant effect on a firm's performance. A low level of leverage can lead to an increase in profit, efficiency as well as firm performance, while a high level of leverage can lead to a decrease in profit efficiency as well as a decrease in firm performance (Skopljak & Luo, 2012). Onimisi (2010) examined the effect of capital structure on the performance of listed manufacturing firms in Nigeria and found a positive relationship between leverages and the financial performance of Nigerian listed manufacturing firms. Likewise, Pachori and Tatala (2012) examined the influence of financial leverage on shareholders' returns and market capitalization in India and found that there is no significant influence of financial leverage on shareholders' returns and market capitalization.

Empirical studies were conducted on the relationship between firm size and performance using natural logarithms of a firm's total assets to measure firm size by various researchers in the field of accounting and finance. Notable among them are Safarova (2010) and Shih (2012), among others. Velnampy and Nimalathasan (2010) conducted a comparative study on the effect of firm size on the profitability of the Bank of Ceylon and Commercial Bank of Ceylon Limited in Sri Lanka from 1997 to 2006. They found a positive relationship between firm size and the financial performance of Commercial Bank of Ceylon Limited. Also, they reported no relationship between firm size and the financial performance of the Bank of Ceylon. Ozgulbas *et al.* (2006) examined the effect of firm size on the performance of listed firms in the Istanbul Stock Exchange from 2000 to 2005 and reported that large firms performed better than small firms. A similar study conducted by Shih (2012) gave the analysis results, which showed that large-size firms performed better than small-size firms. Another study was conducted by Saliha and Abdessatar (2011) on the factors affecting the profitability of listed firms in Tunisia using a sample of 4 firms from 2004 to 2009, and the results revealed a positive relationship between firm size and financial performance. Dogan (2013) too conducted a study using a sample size of 200 companies from 2008 to 2011, where multiple regressions were used in analyzing the data and showed a positive significant relationship between firm size and financial performance of the sampled firms. Driffield *et al.* (2005) have also reported a positive significant relationship between firm size and financial performance.

Pervan and Visic (2012) examined the influence of firm size on its business success from 2002 to 2010. They found a positive significant influence of firm size on firm financial performance. The weakness of their research was that they failed to mention their population, the sample size of their study, and the method of analysis used in analyzing the study's data. Stierwald (2009) examined the factors influencing the profitability of 960 larger firms operating in Australia from 1995 to 2005; the analysis showed that firm size influenced financial performance positively and significantly.

The relationship between liquidity and firms' performance is frequently discussed in financial literature. Liquidity is measured by the ratio of a firm's current assets to current liabilities to determine its ability to settle its short-term financial obligations as at when due and its ability to provide the needed cash for its day-to-day operation for better performance. Hedander (2005) examined the effect of liquidity and firm value, using panel data of 39 non-listed Australian firms from 1992 to 2003, and found a significant positive relationship among the study variables. Cheung *et al.* (2012) also investigated the impact of stock liquidity, corporate governance, and firm performance of US real estate investment trusts from 1992 to 2008; their analysis showed a negative significant impact of liquidity on firms' financial performance. However, they failed to mention their statistical tool of analysis in their research report. In some studies, liquidity is negatively correlated with a firm's financial performance, while other studies reported a positive relationship. Hansen and Sungsuk (2013) investigated the influence of stock liquidity on firm value in the Indonesian Stock Market and reported that high-liquidity firms could generate a high operating profit. The study of liquidity is essential to both internal and external users of accounting information because of its relationship with firms' day-to-day operations. Gill and Mathur (2011) reported a positive significant relationship between liquidity and financial performance of 75 Canadian service firms listed on the Toronto Stock Exchange from 2008 to 2010. An empirical study was conducted on the impact of liquidity ratios on the profitability of Pakistan oil and gas companies by Saleem and Rehman (2011); the results showed a significant impact of liquidity ratios on financial performance. The required liquidity for each company depends on the firm's balance sheet situation. Niresh (2012) viewed liquidity ratio as realizable

cash on the balance sheet to short-term liabilities. Firms with fewer current assets will have problems operating in line with the going concern concept of accounting, while if the current assets are too much, it shows that the return on investment for the company is not in perfect condition. Qi *et al.* (2010) stated that higher accounting quality is associated with higher liquidity, reducing the cost of debt and improving liquidity for the company's future financial performance.

METHODOLOGY

The research design adopted was *ex post facto*. The study used listed consumer goods manufacturing firms from the Nigeria Exchange Group. Relevant secondary data were extracted from the annual reports and accounts of the selected manufacturing firms from 2017– 2021. The population of the study comprised 21 consumer goods manufacturing firms listed in the Nigeria Exchange Group as of December 2021. The sample size of 10 listed consumer goods firms (Champion Brewery P LC, Dangote Sugar Refinery PLC, Guinness Nigeria PLC, Honey Well Fluor Mills PLC, Nestle Nigeria PLC, Nigeria Breweries PLC, Unilever Nigeria PLC, Union Dicon Salt PLC, Bua Food PLC and Nascon Allied Industries PLC) were selected from the population based on judgmental sampling technique. This study employed the Panel Regression Analysis for data collected on the independent variables (firm size, leverage, liquidity, and operating expenses) and the dependent variables (profit after tax, return on asset, and return on equity)

Model Specification

Using multiple regression analysis, the model was modified as follows.

$$PAT_{it} = \beta_0 + \beta_1 FS_{it} + \beta_2 LEV_{it} + \beta_3 LI_{it} + \beta_4 OPE_{it} + u_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{(i)}$$

$$ROA_{it} = \beta_0 + \beta_1 FS_{it} + \beta_2 LEV_{it} + \beta_3 LI_{it} + \beta_4 OPE_{it} + u_i \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{(ii)}$$

$$ROE_{it} = \beta_0 + \beta_1 FS_{it} + \beta_2 LEV_{it} + \beta_3 LI_{it} + \beta_4 OPE_{it} + u_i \quad \ldots\ldots\ldots\ldots\ldots\ldots \text{(iii)}$$

Where;

PAT = profit after tax
ROA = return on asset
ROE = return on equity
FS = firm size
LEV = leverage
LI = liquidity
OPE = operating expenses
β_0 = constant slope to be estimated
$\beta_{1-}\beta_4$ =intercept to be estimated
U = error term

RESULTS AND DISCUSSIONS

Data Presentation

The data extracted were estimated based on the regression analysis to determine the effect of the variables. Firm size (FSIZE), liquidity, leverage, and operating expenses (OPE) were used as the independent variables (components of corporate attributes), while profit after tax (PAT), return on asset (ROA), and return on equity (ROE), were used as the dependent variable. The adjusted R square, which is the coefficient of determination, and the F statistic were used to ascertain the significance of the overall model. Specifically, the probability of the F-statistic test was used to test the study's hypotheses to determine the relationship between the variables. The data for the various variables are shown in Appendix 1 below.

To avoid running a spurious regression, a unit root test was carried out to ensure that the variables employed in this study are mean reverting, i.e., stationary. For this purpose, the Augmented Dickey-Fuller (ADF) test was utilized, and the test result is presented in the table below.

Table 1: Augmented Dickey-Fuller (ADF) test

Variable	ADF Stat	5% Critical Value	P-value at level	P-value 1st difference	Level Form
FSIZE	-6.401035	-2.923780	0.0879	0.0000	1st difference
Liquidity	-4.834851	-2.922449	0.0002	-	At level
Leverage	-5.260436	-2.922449	0.0001	-	At level
OPE	-7.254531	-2.9228142	0.3376	0.0000	1st difference
PAT	-2.926632	-2.922449	0.0495	-	At level
ROA	-6.703050	-2.922449	0.0000	-	At level
ROE	-3.760853	-2.922449	0.0060	-	At level

Source: Extraction from e-view computation

The table above is the result of the first test required to know the individual stationarity of the variables. The Augmented Dickey-Fuller (ADF) unit root test result can be interpreted using either the t-statistic or the p-value. A variable is stationary if the ADF t-statistic in absolute terms is greater than the ADF 5% critical value or the p-value is less than or equal to 0.05 significance level. Table 1 above shows that liquidity, leverage, profit after tax, return on asset, and return on equity are stationary at a level. At the same time, the firm size and operating expenses are stationary at 1st difference. According to Gujarati and Porter (2007), a non-stationary time series can be made stationary through integrated series by differencing. Hence, since all the variables are stationary, we proceeded to the cointegration test.

Data analysis

Table 2: Hausman test for hypothesis one

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	26.642343	4	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
FSIZE	0.122075	0.791101	0.017038	0.0000
LEVERAGE	0.016768	-0.000922	0.000056	0.0185
LIQUIDITY	-0.000009	-0.000021	0.000000	0.3749
OPE	0.047443	0.074898	0.001689	0.5041

Source: Extraction from e-view computation

The Hausman test is used to differentiate between the fixed effects model and the random effects model in panel data. In this case, fixed effect panel data is preferable. This is because the null hypothesis was rejected (a p-value of 0.000 is less than 0.05).

Table 3 Panel regression result on the effect of corporate attributes on profit after tax.

Dependent Variable: LOGPAT
Method: Panel Least Squares
Date: 09/02/23 Time: 02:54
Sample: 2017 2021
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.724056	1.223193	3.044537	0.0044
FSIZE	0.122075	0.159811	0.763872	0.4501
LEVERAGE	0.016768	0.025658	0.653513	0.5177
LIQUIDITY	-8.86E-06	5.33E-05	-0.166194	0.8690
OPE	0.047443	0.088769	0.534447	0.5964

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.966721	Mean dependent var	4.827935
Adjusted R-squared	0.954360	SD dependent var	1.266335
SE of regression	0.270534	Akaike info criterion	0.458116
Sum squared resid	2.561596	Schwarz criterion	0.998636
Log-likelihood	2.776160	Hannan-Quinn criter.	0.663188
F-statistic	78.20839	Durbin-Watson stat	2.911611
Prob(F-statistic)	0.000000		

Source: Extraction from E-view computation

The panel data result shows the effect of corporate attributes on profit after tax of listed consumer goods manufacturing firms in Nigeria. The coefficient of determination R-square of 0.967 implied that 96.7% of the sample variation in the dependent variable profit after tax (PAT) is explained or caused by the explanatory variables corporate attributes (FSIZE, Liquidity, Leverage, and OPE) while 3.3% is unexplained. This remaining 3.3% could be caused by other factors or variables not built into the model. The value of R-square indicates a positive relationship between the dependent variable (PAT) and independent variables (FSIZE, Liquidity, Leverage, and OPE). The F-statistic was also used to test the overall significance of the model. The F-value of 78.20839 with a p-value of 0.00000 is an indication that the model is statistically significant at a 5 percent level of significance. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 2.911611 falls outside the conclusive region of the Durbin-Watson partition curve. Hence, there is no sign of autocorrelation.

Hypothesis one

H01: Corporate attributes (leverage, firm size, liquidity, and operating expenses) have no significant effect on profit after tax of listed consumer goods manufacturing firms in Nigeria

The F-statistic is 78.20839 with a p-value of 0.00000 level of significance. Since the probability of the F statistics is less than a 5% level of significance, we would reject the null hypothesis, $H_{0,}$ and therefore conclude that corporate attributes (leverage, firm size, liquidity, and operating expenses) have a significant effect on profit after tax of listed consumer goods manufacturing firms in Nigeria**.**

Table 4: Hausman test for hypothesis two

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		24.438096	4	0.0001
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
FSIZE	-0.085211	-0.008583	0.000252	0.0000
LEVERAGE	-0.002219	-0.002327	0.000002	0.9366
LIQUIDITY	0.000000	-0.000003	0.000000	0.2478
OPE	0.007815	0.012918	0.000046	0.4522

Source: Extraction from e-view computation

The Hausman test differentiates between the fixed and random effects models in panel data. In this case, fixed effect panel data is preferable. This is because the null hypothesis was rejected (a p-value of 0.0001 is less than 0.05).

Table 5: Panel regression result on the effect of corporate attributes on return on asset

Dependent Variable: ROA
Method: Panel Least Squares
Date: 09/02/23 Time: 02:57
Sample: 2017 2021
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.547988	0.129191	4.241705	0.0002
FSIZE	-0.085211	0.016879	-5.048368	0.0000
LEVERAGE	-0.002219	0.002710	-0.819037	0.4183
LIQUIDITY	4.80E-07	5.63E-06	0.085155	0.9326
OPE	0.007815	0.009376	0.833600	0.4102
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.600242	Mean dependent var		0.026913
Adjusted R-squared	0.451761	SD dependent var		0.038590
SE of regression	0.028573	Akaike info criterion		-4.037747
Sum squared resid	0.028575	Schwarz criterion		-3.497227
Log-likelihood	112.9248	Hannan-Quinn criter.		-3.832675
F-statistic	4.042541	Durbin-Watson stat		2.846696
Prob(F-statistic)	0.000479			

Source: Extraction from e-view computation

The panel data result shows the effect of corporate attributes on the return on assets of listed consumer goods manufacturing firms in Nigeria. The coefficient of determination R-square of 0.600 implied that 60.0% of the sample variation in the dependent variable return on asset (ROA) is explained or caused by the explanatory variables corporate attributes (FSIZE, Liquidity, Leverage, and OPE) while 40.0% is unexplained. This remaining 40.0% could be caused by other factors or variables not built into the model. The R-square value indicates a positive relationship between the dependent variable (ROA) and independent variables (FSIZE, Liquidity, Leverage, and OPE). The F-statistic was also used to test the overall significance of the model. The F-value of 4.042541 with a p-value of 0.000479 is an indication that the model is statistically significant at a 5 percent level of significance. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 2.846696 falls outside the conclusive region of the Durbin-Watson partition curve. Hence, there is no sign of autocorrelation.

Hypothesis two

H02: Corporate attributes (leverage, firm size, liquidity, and operating expenses) have no significant effect on the return on assets of listed manufacturing firms in Nigeria

The F-statistic is 4.042541 with a p-value of 0.000479 level of significance. Since the probability of the F statistics is less than a 5% level of significance, we would reject the null hypothesis, H_0, and therefore conclude that corporate attributes (leverage, firm size, liquidity, and operating expenses) have a significant effect on return on asset of listed consumer goods manufacturing firms in Nigeria.

Table 6: Hausman test for hypothesis three

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.296808	4	0.9900

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
FSIZE	0.034601	0.031117	0.000534	0.8802
LEVERAGE	0.000226	0.000105	0.000002	0.9226
LIQUIDITY	-0.000006	-0.000005	0.000000	0.6800
OPE	0.014487	0.011542	0.000046	0.6648

Source: Extraction from e-view computation

The Hausman test is used to differentiate between the fixed effects model and the random effects model in panel data. In this case, random effect panel data is preferable. This is because the null hypothesis was accepted (a p-value of 0.9900 is greater than 0.05).

Table 7: Panel regression result on the effect of corporate attributes on return on equity

Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 09/02/23 Time: 03:02
Sample: 2017 2021
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.149870	0.165623	-0.904889	0.3705
FSIZE	0.031117	0.018959	1.641243	0.1079
LEVERAGE	0.000105	0.004637	0.022739	0.9820
LIQUIDITY	-4.90E-06	9.73E-06	-0.503865	0.6169
OPE	0.011542	0.015152	0.761761	0.4503

Effects Specification		
	SD.	Rho
Cross-section random	0.084076	0.7340
Idiosyncratic random	0.050609	0.2660

Weighted Statistics			
R-squared	0.075456	Mean dependent var	0.031888
Adjusted R-squared	-0.008593	SD dependent var	0.048487
SE of regression	0.048457	Sum squared resid	0.103316
F-statistic	0.897763	Durbin-Watson stat	1.897628
Prob(F-statistic)	0.473468		

Unweighted Statistics			
R-squared	0.107652	Mean dependent var	0.120418
Sum squared resid	0.288912	Durbin-Watson stat	0.678600

Source: Extraction from E-view computation

The panel data result shows the effect of corporate attributes on the return on equity of listed consumer goods manufacturing firms in Nigeria. The coefficient of determination R-square of 0.075 implied that 7.5% of the sample variation in the dependent variable return on equity (ROE) is explained or caused by the explanatory variables corporate attributes (FSIZE, Liquidity, Leverage, and OPE) while 92.5% is unexplained. This remaining 95.5% could be caused by other factors or variables not built into the model. The R-square value indicates a positive relationship between the dependent variable (ROE) and independent variables (FSIZE, Liquidity, Leverage, and OPE). The F-statistic was also used to test the overall significance of the model. The F-value of 0.897763 with a p-value of 0.473468 is an indication that the model is not statistically significant at a 5 percent level of significance. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 1.897628 falls outside the conclusive region of the Durbin-Watson partition curve. Hence, there is no sign of autocorrelation.

Hypothesis three

H03: Corporate attributes (leverage, firm size, liquidity, and operating expenses) have no significant effect on the return on equity of listed consumer goods manufacturing firms in Nigeria

The F-statistic is 0.897763 with a p-value of 0.473468 level of significance. Since the probability of the F statistics is greater than a 5% level of significance, we would accept the null hypothesis, $H_{0,}$ and therefore conclude that corporate attributes (leverage, firm size, liquidity, and operating expenses) have no significant effect on return on equity of listed consumer goods manufacturing firms in Nigeria**.**

Discussion of findings

The result of hypothesis one revealed that corporate attributes (leverage, firm size, liquidity, and operating expenses) significantly affect the profit after tax of listed consumer goods manufacturing firms in Nigeria. The decision is based on the P-value being less than 0.05. The finding is consistent with the findings of Pervan and Visic (2012), who investigated the influence of corporate attributes on firm performance. The study finds that corporate attributes positively and significantly affect a firm's performance. Also, the findings of Ozguibas *et al*. (2006) examined the effect of firm size on the performance of listed firms in the Istanbul stock exchange. The result revealed that firms' size significantly affects firm performance.

The result of hypothesis two revealed that corporate attributes (leverage, firm size, liquidity, and operating expenses) significantly affect the return on assets of listed consumer goods manufacturing firms in Nigeria. The decision is based on the P-value being less than 0.05. The finding is consistent with the findings of Ojo (2012), who examined the impact of firm characteristics on a firm's performance. The results proved that firm characteristics on the firm's performance. Also, Pervan and Visic (2012) investigated the influence of corporate attributes on firm performance. The study finds that corporate attributes positively and significantly affect a firm's performance.

Results in hypothesis three revealed that corporate attributes (leverage, firm size, liquidity, and operating expenses) have no significant effect on the return on equity of listed consumer goods manufacturing firms in Nigeria. The finding is consistent with the findings of Mawih (2014), which revealed that the structure of assets does not substantially impact profitability in terms of ROE. Another study result indicated that only the non-current assets impacted ROE.

CONCLUSION AND RECOMMENDATIONS

The study summarized the findings as follows: Corporate attributes (leverage, firm size, liquidity and operating expenses) have a significant effect on profit after tax of listed consumer goods manufacturing firms in Nigeria. Corporate attributes (leverage, firm size, liquidity, and operating expenses) have a significant effect on the return on assets of listed consumer goods manufacturing firms in Nigeria. Corporate attributes (leverage, firm size, liquidity and operating expenses) have no significant effect on return on equity of listed consumer goods manufacturing firms in Nigeria**.**

The study therefore concluded that corporate attributes of firm size, leverage, liquidity and operating expenses are fundamental to the financial performance of listed consumer goods manufacturing firms in Nigeria. Based on the findings of the study, the following recommendations were made: The management of listed consumer goods manufacturing firms in Nigeria should embark on product innovations and improvements in order to boost its total sales and grow its asset in the bid to increase the firm size. Listed consumer goods manufacturing firms in Nigeria should increase the level of leverage in their capital structure for better financial performance. This is because leverage has positive relationship financial performance as depicted by profit after tax and return on equity. The listed consumer goods manufacturing firms in Nigeria should maintain adequate liquidity position in order to enable them have good working capital management so as to sustain their production and take advantage of present and potential business. The operating expense of listed consumer goods manufacturing firms should be controlled and geared towards productive activities that will improve their financial performance.

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APPENDIX 1
DATA USED FOR ANALYSIS

FIRMS	LOGPAT	ROA	ROE	FSIZE	LEVERAGE	LIQUIDITY	LOGOPE
CHAMPION	4.190304	0.009316	0.151639	6.221065	4.3171999	33.5486	4.926178
CHAMPION	4.400797	0.018151	0.271602	6.141894	4.1197466	4.805732	4.210319
CHAMPION	2.784617	0.000578	0.008343	6.022644	5.0445784	26	4.532181
CHAMPION	3.994361	0.010528	0.136415	5.972001	5.255597	136	4.474289
CHAMPION	4.118463	0.013946	0.17997	5.974014	5.5818331	6.077519	4.272051
DANSUGAR	6.550545	0.026753	0.027097	8.123172	0.8293307	0.24751	4.243261
DANSUGAR	6.183237	0.011584	0.011762	8.119377	0.8441152	0.089869	4.188928
DANSUGAR	6.571739	0.028396	0.028773	8.118484	1.0188961	7.229206	5.651988

DANSUGAR	6.401927	0.019501	0.019658	8.111861	0.8858605	7.209301	5.50584
DANSUGAR	6.732145	0.041019	0.041268	8.119158	0.7611421	5.97877	5.391422
GUINNESS	4.69763	0.014077	0.078903	6.549119	0.4774369	2.874767	5.350262
GUINNESS	4.471174	0.092488	0.063131	5.50509	0.7281866	1.357157	5.51893
GUINNESS	4.622566	0.015649	0.097851	6.428071	0.4752513	1.595826	5.391422
GUINNESS	4.90531	0.033166	0.224014	6.384611	0.2935554	2.336646	5.350262
GUINNESS	4.930531	0.049582	0.293623	6.235203	0.3246609	2.571206	6.746651
HONEYFLOUR	4.360328	0.01333	0.117922	6.235499	1.2384114	2.392356	6.703533
HONEYFLOUR	4.249639	0.012883	0.08824	6.139632	1.0589588	1.865917	6.614385
HONEYFLOUR	3.736954	0.004204	0.029433	6.113322	0.8577847	1.560369	6.579714
HONEYFLOUR	4.14314	0.011288	0.075765	6.090513	0.7736383	7.947341	5.29913
HONEYFLOUR	4.139753	0.011622	0.079695	6.07446	0.6789921	1.501635	6.703533
NESTLE	3.97044	0.034559	0.035631	5.431885	12.900006	1.8651	6.614385
NESTLE	3.967314	0.0344	0.035406	5.430754	1.6067818	0.883951	7.782546
NESTLE	3.875466	0.265424	0.027093	4.451525	1.143315	0.524896	7.806668
NESTLE	3.338456	0.007575	0.007837	5.459046	0.9206844	1.636954	7.375179
NESTLE	3.754578	0.018226	0.018445	5.493891	1.1999539	3.659227	6.96323
NB	8.222508	0.061537	0.326116	9.433373	0.3465154	20.3231	5.94468
NB	8.200653	0.056188	0.274342	9.451008	0.36412	1.896296	6.461008
NB	8.094121	0.047525	0.262187	9.417196	0.7015259	1.312345	6.297894
NB	7.974549	0.041406	0.23251	9.357483	0.8347469	8.934276	6.241065
NB	7.950223	0.041931	0.247757	9.327688	0.7024796	7.262502	6.307355
UNILEVER	3.976258	0.000872	0.165658	7.035781	2.0912972	2.905802	6.175723
UNILEVER	3.900586	0.007442	0.139168	6.028896	3.7240963	5.285776	6.20503
UNILEVER	3.714497	0.006237	0.090667	5.919498	1.4417189	1.146217	6.240439
UNILEVER	4.012542	0.012875	0.180092	5.902792	1.0547993	1.486205	6.081182
UNILEVER	3.954484	0.001092	0.157557	6.916211	0.7938377	3.698113	6.218116
UNION DICO	4.613281	0.01143	0.112582	6.555252	1.8023522	1.437959	5.599951
UNION DICO	4.616958	0.01412	0.103268	6.467138	1.2528289	2.566377	5.577112
UNION DICO	4.67799	0.01876	0.12187	6.40476	0.664945	1.170326	5.643744

			8	3			
UNION DICO	4.67799	0.021496	0.140856	6.345636	0.3840452	3.18202	5.458633
UNION DICO	4.60296	0.017138	0.142172	6.369004	0.4036314	2.503507	5.280034
BUA FOODS	4.265714	0.013923	0.09215	6.121985	0.4746685	6.854655	5.280034
BUA FOODS	4.050728	0.008419	0.035219	6.125456	0.3000009	507.369	5.280034
BUA FOODS	4.200987	0.014139	0.06337	6.050567	0.3662679	200.7684	5.417221
BUA FOODS	4.256116	0.018017	0.077235	6.000424	0.3257247	237.7773	5.682557
BUA FOODS	4.311457	0.022201	0.098588	5.965086	0.3760233	92.05827	5.40591
NASCON	5.218746	0.033394	0.245144	6.695083	0.6791722	151.5071	5.486078
NASCON	5.1847	0.031654	0.219207	6.684276	0.6002668	149.4917	5.251103
NASCON	5.056467	0.026585	0.186406	6.631823	0.4792545	90.57095	5.280681
NASCON	4.994687	0.02634	0.18061	6.574069	0.4901965	290.4286	5.304598
NASCON	4.970714	0.027303	0.182324	6.534511	0.3863142	94.47282	7.356439

FINANCIAL DERIVATIVE RISK INFORMATION DISCLOSURE AND FINANCIAL REPORTING QUALITY

Nwachukwu, Christina O., Nmesirionye, Josephine A. and Nmesirionye, Ndubuisi O.
Michael Okpara University of Agriculture, Umudike, Abia State Nigeria.

ABSTRACT
This study investigated how disclosure of financial derivative risk information influences the quality of financial reporting of various Nigerian deposit money banks. The analysis relied on the yearly financial reports of twelve Nigerian commercial banks. The research spans a decade, from fiscal years 2012 through 2021. While the cash flow to asset ratio was employed as a control variable, financial derivative assets were employed as the independent variable. The pooled panel Least Square regression analysis technique was employed to test the study's hypothesis, which revealed that disclosing financial derivative risk information increases the value of discretionary accrual, hence undermining the quality of financial reports. The study concluded that financial derivatives risk information disclosure has a negative impact on the quality of financial reports of Nigerian deposit money banks during the period under consideration. Hence, on the basis of the findings, this study recommends that policymakers work with regulatory bodies and standard-setting organizations to develop standardized disclosure practices for derivative instruments among deposit money banks in Nigeria.
Keywords: Financial Derivative Risk, Financial Reporting Quality, Jones Discretionary Accrual

INTRODUCTION

In today's globalized business landscape, competition related to investment and funding has become increasingly complex. Companies must attract and retain investors by offering profitable investment opportunities to stay ahead. One way to achieve this is by constantly creating value within the company. As Kagan (2020) notes, the value of a company is a crucial consideration of its success, as it instills market confidence in its current performance and future prospects. In recent years, alternative financial instruments have emerged in response to the changing investment and funding landscape. Derivatives are one such instrument that has seen significant growth in popularity. Derivatives are financial contracts whose value is generated from underlying assets (Onyeka *et al.,* 2018). Although derivatives are often linked with a single asset class, their value can be derived from one or more underlying assets from different asset classes. Because of this complexity, derivatives can be extremely risky, especially when embedded in new debt and equities investment vehicles (Valdivia-Velarde, 2012). Despite its drawbacks, derivatives have become a popular risk management tool among financial organizations.

As Zhang (2009) notes, derivatives can be a risk-reduction tool for financial institution managers in many developed countries. Additionally, disclosing financial derivative information can enhance the quality of financial reports produced, further instilling confidence in the company's performance (Bartram et al., 2011). Although the development of alternative financial instruments like derivatives has added complexity to the investment and funding landscape and has offered the potential for significant profits, they can also be highly risky, especially when embedded in new investment vehicles. Nonetheless, derivatives have become an important risk management tool in financial institutions. Companies can improve the quality of their financial reports and instill trust in their current and future performance by disclosing information about financial derivatives.

The primary goal of financial reporting is to provide high-quality financial information about economic entities that can be used to make economic decisions. This information is primarily financial and includes details about a firm's operations and expected cash flows, which is essential for equity investors, as noted by Osirim and Moses (2019), Agbogun and Taiwo (2020), and Uwuigbe *et al.* (2018). Financial reporting involves organizing accounting information by management to address the needs of different users such as regulators, government, customers, suppliers, management, and investors (both potential and existing investors). A high-quality financial report is a robust financial analysis, feasibility analysis, and interpretation tool. According to Halilbegovic and Mekic (2017), disclosing financial derivative instruments results in high-quality financial reporting information that positively influences capital providers' and other stakeholders' investment, credit provision, and resource allocation decisions. This link between financial derivative information disclosure and financial reporting quality is essential for creating value and preventing adverse events that may not have been adequately considered in relevant business scenarios. Banks can use derivatives to hedge off-balance-sheet transactions by speculating on changes in exchange rates, interest rates, and commodity prices. This advantage encourages banks to position their

businesses and improve their efficiency in risk management, which should be quantified to maintain value creation.

The issue of disclosing information about derivative instruments employed by finance companies to manage financial risks is a highly debated topic in financial economics. This debate stems from the bankruptcies and near collapses in the 1990s and 2000s, partially caused by derivatives (Osirim & Moses, 2019; Agbogun & Taiwo, 2020). For instance, Enron's collapse was attributed to its use of energy derivatives, Barings Bank lost £927 million in a futures contract, and Metallgesellschaft AG suffered over $1 billion in future hedge losses (Julius & James, 2021). More recently, Mitchells and Butlers' hedging failure of £391 million resulted in a loss of £274 million, eroding shareholders' value by 30% and wiping out the company's total profit from the previous two years (Julius & James, 2021). Various empirical studies have demonstrated insufficient reporting of derivative usage in companies under different regulatory regimes in the US and the UK (Barbosa et al., 2020; Bocken et al., 2019; Fonseca et al., 2020; Migliorelli, 2021; Oprean-Stan et al., 2020). Calls to harmonize reporting practices using International Financial Reporting Standards (IFRSs) instead of local Generally Accepted Accounting Principles (GAAP) are increasing, with expectations that this will increase what is reported in annual reports. While several studies on financial reporting quality have been conducted worldwide, including Chanzu and Gekara (2014), no similar study has specifically examined the effect of disclosing financial derivative risk information on financial reporting quality in Nigeria. Similar studies have considered the corporate governance and firm characteristic factors that influence financial reporting quality in Nigeria (Echobu *et al.*, 2017; Kwanbo, 2020; Miko & Kamardin, 2015; Olowokure *et al.*, 2016; Seiyaibo & Okoye, 2020). Therefore, this study aims to provide empirical evidence on the relationship between financial derivative risk information disclosure and financial reporting quality of listed banks in Nigeria, among other objectives.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Financial Derivative Disclosure

Financial derivatives are financial instruments whose value is determined by the price and performance of another asset, as defined by McDonald (2013) and the International Monetary Fund (IMF). These derivatives are contracts linked to specific financial instruments, indicators, or commodities used to exchange specific financial risks in financial markets. The value of financial derivatives often depends on the performance of the underlying asset, which can be equity (such as stock or stock index), fixed-income instrument (including treasury bonds or notes), commodities (such as gold, silver, crude oil, wheat, rice among others), interest rates (such as London Inter-bank Offered Exchange Rate, EURIBOR- Euro Inter-Bank Offered Rate, NIBOR- Nigerian Inter-Bank Offered Rate), foreign currency, and other financial instruments. Financial derivatives are used by financial institutions and corporations to hedge against various risks, such as commodity risks, foreign exchange risks, and interest rate risks Hedging involves adopting a position that contradicts the existing risky position For instance, if a company acquires short-term loans with variable interest rates or reissues commercial paper upon its maturity, it becomes vulnerable to fluctuations in interest rates In these situations, the company can mitigate its exposure by entering into a transaction that yields a profit roughly equivalent to the potential loss in case of an interest rate increase Businesses have the option to utilize forwards, futures, and options to safeguard themselves against the impact of fluctuating interest rates To hedge foreign exchange risks, firms can use foreign exchange futures contracts Interest rate swaps, which are a significant type of derivative, are used to hedge against interest rate risks Interest rate swaps involve the exchange of fixed interest payments for variable rate payments, or the reverse, without exchanging the underlying principal sums Derivative hedging techniques using interest rate swaps and caps can help institutions retain core longer-duration assets to manage interest rate risk.

Financial Reporting Quality (FRQ)

Different authors have varying definitions of financial reporting quality. Although no definition is widely accepted, the concept of financial reporting quality indicates that some accounting information is more reliable and effective in communicating its intended message than others. According to Pounder (2013), the value of financial reporting is often determined by its quality. Accounting quality is highly beneficial to various users of financial reports. It is defined as the degree to which accounting information is free from errors, misstatements, and other unethical accounting and managerial practices Briddle, Gilles, and Verdi (2009) describe financial reporting quality as the precision with which financial reports communicate information about the firm's expected cash flows to equity investors Elbannan (2021), defines reporting quality as the extent to which a company's financial report communicates its underlying economic state and performance during the measurement period Nonetheless, Tang-Chen and Zhijun (2008) characterize financial reporting quality as the extent to which financial statements offer accurate and unbiased information regarding the fundamental performance and financial standing.

The definition of financial reporting quality varies among authors but generally implies that certain accounting information is more reliable and better than others in conveying its intended message. The value of financial reporting is usually determined by its quality, according to Pounder (2013). Accounting quality is highly beneficial to various users of financial reports. It is described as the degree to which accounting information is free from errors, misstatements, and other unethical accounting and managerial practices Financial reporting serves a multifaceted purpose, including providing fair financial and other information that enables the efficient functioning of capital and other markets and facilitates the allocation of scarce resources in the economy, according to FASB Financial reporting quality is broad, covering financial and non-financial information that is useful for decision-making Factors affecting financial reporting quality include the legal system, source of financing, tax system characteristics, involvement of accounting professionals, economic development, and accounting literacy Qualitative criteria must be met to achieve a certain quality in financial reporting The IASB and FASB have outlined these criteria in their conceptual frameworks, and high quality is achieved by adhering to the objective and qualitative characteristics of financial reporting information Financial reporting quality is vital for the effective functioning and usefulness of the accounting system.

Derivative Risk Disclosure and Financial Reporting Quality

Financial risks refer to the exposure of firms to changes in value resulting from volatility in interest rates, foreign exchange rates, and commodity prices The instability in cash flows and earnings that arise from such volatility makes it difficult for managers to plan for investment and dividend payments, thereby reducing the value of future cash flows to the firm To maximize shareholder wealth and increase a firm's value, it is essential to manage these risks through appropriate approaches, particularly as managers have an information advantage over shareholders, as noted by Bhattacharya (1979) and Healy and Palepu (2001) However while managing risks is essential, Carey and Hrycray (1999) and Healy and Palepu (2001) highlight that reducing risk is not equivalent to managing risks This is because firms with lower risks will eventually earn lower returns due to the risk-return trade-off, as noted by Campello *et al*. (2005).

Effective risk management is crucial for firms to create value, as it reduces the likelihood of bankruptcy and makes it easier to pursue profitable investment projects, enhancing both the firm's value and shareholders' wealth According to Breeden and Viswanathan (1990), managing risks results in more stable cash flows, which are more valuable to shareholders Crosby and Briggs (1993) similarly argue that stability in valuable cash flows is one of two ways firms can add value to their shareholders, with the second being lowering their discount rates In recent times, firms have become increasingly aware of derivatives, using them for both risk management and speculative purposes As such, their financial statements have been gradually reflecting this trend, with regulatory bodies now requiring greater disclosure in financial reporting, as noted by Graham and Rogers (2002) This awareness has grown following the 2008-09 global financial crisis, which left a lasting impact on the world economy, with many countries still struggling to recover Consequently, scholars have devoted much effort to investigating the role of derivatives in the crisis and identifying ways in which firms can avoid similar situations in the future This study aims to examine the effect of financial derivative risk disclosure on financial reporting quality, expecting that such disclosure will significantly decrease the quality of financial reporting.

Theoretical Framework

Information Asymmetry Theory

The information asymmetry theory is one relevant theory that can help explain the theoretical nexus between financial derivative risk disclosure and financial reporting quality. This theory posits that in financial markets, information is not equally available to all market participants (Karunaratne & Rajapakse (2015). As a result, some market participants have an information advantage over others, which can lead to inefficiencies in financial markets In the context of financial derivative risk disclosure and financial reporting quality, the information asymmetry theory suggests that firms that disclose complete and accurate information about their derivative risks can reduce information asymmetry and enhance market efficiency (Kwon, 2018) By disclosing relevant and timely information about their derivative risks, firms can reduce the uncertainty and risk associated with their financial performance and risk exposure thereby help investors and analysts make more informed investment decisions, which can enhance the efficiency of financial markets Moreover, the information asymmetry theory suggests that the completeness and accuracy of financial information disclosed by firms can affect the cost of capital and the valuation of firms (Gay, Lin, & Smith, 2011) When firms disclose complete and accurate information about their derivative risks, investors can better assess the risk and return of the firm, which can lead to a lower cost of capital and higher firm valuation Conversely, incomplete or inaccurate information can lead to mispricing and misallocation of capital, leading to lower firm valuation and higher cost of capital Therefore, the information asymmetry theory provides a theoretical basis for the importance of financial derivative risk disclosure in enhancing financial reporting quality and improving market efficiency.

Empirical Review

Osayi *et al.* (2018) researched to analyze the impact of financial market derivatives on the performance of deposit money banks in Nigeria The study utilized profit after tax as a performance measure, while Derivative Financial Liabilities, Derivative Financial Assets, Trading Income on Derivative, and Total Asset were used as measures of financial market derivatives The study covered a period of five years (2010-2014) and employed ordinary least square regression analysis technique to determine the relationship between the variables The results indicate that there exists a positive correlation between derivative financial assets and the performance of deposit money banks in Nigeria.

Mungai and Wafula (2021) studied how financial risk hedging practices affect the value of listed non-financial firms in Kenya. To achieve this, the researchers used secondary data extracted from published annual reports of non-finance listed firms for the 2015-2019 period and primary data gathered through well-administered questionnaires to the CFOs to establish the strategies used by the firms. The study results showed that market and credit risk hedging practices positively and significantly affected firm value. Additionally, the findings suggest that liquidity risk hedging and financial risk hedging practices also positively and significantly affected the value of listed non-financial firms in Kenya.

Yang *et al.* (2022) investigate the influence of financial derivatives on firms' value by examining the attributes of managers in A-share listed companies in the Shanghai Stock Exchange market from 2011 to 2020. The research employs a moderating effects model, which reveals that financial derivatives significantly influence the valuation of Chinese-listed corporations. Notably, exchange rate derivatives exhibit a more pronounced impact in this context. Additionally, the study reveals that the more significant the proportion of managers who own shares and have a financial background, the more effective the use of financial derivatives. The findings of this study have implications for companies' risk management decisions, particularly considering the COVID-19 pandemic.

Eragbhe and Omokhudu (2018) conducted a study to determine the relevant value of financial derivative instruments in listed Nigerian banks from 2012 to 2015. The study used a modified version of the Ohlson model, which included financial derivative assets and liabilities as variables. The study used panel regression analysis to account for heterogeneity in the sample data. The study results showed no statistically significant association between derivative assets and share prices of listed commercial banks in Nigeria. The analysis indicated that except for earnings per share and firm size, derivative assets, derivative liabilities, and book value per share were not significantly relevant to value.

Adedamola and Shittu (2020) conducted a study to investigate the impact of financial derivatives on the profitability of eight selected deposit money banks in Nigeria. The study collected data from the annual financial reports of the banks between 2012 and 2017. It used panel regression analysis to examine the relationship between the dependent variable, profitability, and the independent variables, financial derivative assets and liabilities. Loans and advances to customers were used as the controlling variable. The results revealed that financial derivative assets and loans/advances to customers positively and significantly impact profitability, while financial derivative liabilities have an insignificant effect. The study provides insights into the impact of financial derivatives on the profitability of deposit money banks in Nigeria.

METHODOLOGY

In this study, *the ex-post facto* research design is adopted Specifically, the choice of *ex post facto* is informed by the fact that the study relies on historical data The population of this study comprises all commercial banks listed on the Nigerian Exchange Group The focus of this study is on commercial banks; that is banks that accept deposits and give out loans From the Stock exchange factbook (2021) the total listed commercial banks were 14 This study employs purposive sampling technique with strict requirement for availability and accessibility of relevant data for the purpose of analysis Thus, 12 banks met the criteria for the study period of ten (10) years (2012 - 2021) Specifically, the ordinary Least Square regression technique is chosen because this method of analysis helps to establish the cause-effect of an independent variable on a dependent variable of interest It reflects the level to which a set of variables can predict a specific outcome The data was examined to ensure it meets with the Ordinary Least Square assumptions of normality of data, no multicollinearity, and no heteroscedasticity to enhance the reliability of the conclusion drawn In this study, we specify our model to capture the effect of financial derivatives risk information disclosure on the financial reporting quality of listed banks in Nigeria Succinctly, the econometric form of the model is expressed as:

Financial Derivative Model

$$FRQT_{it} = \beta_0 + \beta_1 DFRD_{it} + \beta_2 CFOA_{it} + \mu_{it}$$

Where:

FRQT = Financial Reporting Quality

DFRD = Derivative Risk Disclosure

CFOA	=	Cashflow
β_0	=	Constant
β_1- β_5	=	Slope Coefficient
μ	=	Stochastic disturbance
i	=	i^{th} banks
t	=	time period

RESULTS AND DISCUSSIONS

The study provides basic statistical information for the explanatory and dependent variables. Each variable is described based on the mean, standard deviation, maximum, and minimum. Table 2 displays the descriptive statistics result of the study.

Table 2 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
josa	120	-.0535	.0980709	-.37	.25
dfrd	120	.3333333	.4733811	0	1
cfoa	120	.0248333	.0799263	-.17	.23

Source: Authors' Computation

The result from the descriptive statistics shows that the mean value of financial reporting quality in terms of Jones Discretionary Accrual (JOSA) is -0.05, corresponding to a standard deviation of 0.10 during the period under investigation. In general, the lower the value, the better the financial reporting quality since financial reporting quality has been documented to have an inverse relationship with the Jones Discretionary Accrual Model. The result also revealed that the independent variable of derivative information disclosure (DFRD) has a mean value of 0.33 with a standard deviation of 0.47 during the period under review.

Discussion of Result

Specifically, to test the formulated hypotheses of this study, the pool ordinary least square regression analysis technique is employed. The test for heteroscedasticity reveals the absence of heteroskedasticity, and the result is presented and discussed.

Table 2 Pool Ordinary Least Square Regression Analysis Results

VARIABLES	Derivative Risk Disclosure	Cash Flow to Asset	Constant
Coef. **z_ Stat** **Prob_ t**	0.009 (5.99) {0.000} ***	-1.138 (-20.38) {0.000}	-0.028 (-6.02) {0.000)
Wald chi^2 = 20.03, Prob. > Chi^2= 0.0002			

F-Statistics: {270.94 (0.0000)}; R-Squared: 0.8224; Mean VIF: 1.36; Hottest: {0.10 (0.7472)}

Note: () and {} contains t-statistics and the respective probabilities

Where: * represents a 1% level of statistical significance**

Authors' Computation

The table shows the R-squared value of 0.8224, which indicates that about 82% of the systematic variations in the financial reporting quality measured in terms of Jones Discretionary Accrual of listed banks in Nigeria is jointly explained by the independent variable and control variable employed in the model Further, the F-statistic value of 155.49 and the associated p-value of 0.0000 shows that the specified model is statistically significant at 1% level suggesting that the regression model is valid and can be used for statistical inference However, the study conducts multicollinearity and heteroscedasticity tests to further ascertain the validity of the regression estimates Specifically, as indicated in table 2, a mean VIF value of 1.83 indicates the absence of multicollinearity. In contrast, the test for heteroscedasticity indicates a homoscedastic model that appears statistically appropriate for interpretation and policy recommendation.

Specifically, the results reveal that derivative risk information disclosure {0.009 (0.000)} has a significant positive effect on the financial reporting quality of listed commercial banks in Nigeria Increases in the values of discretionary accrual (employed in measuring financial reporting quality) connotes poor financial reporting quality Therefore, the null hypothesis is rejected This finding is consistent with similar outcome of Smith et al. (2020) who concluded that firms which use derivative in risk management show more growth opportunities and more convex tax function compared to that of non-users and thus decreases financial reporting quality However, this outcome negates that of Geczy *et al*. (1997) This result aligns with those of Ayturk *et al.* (2016), who noted that derivatives are complex financial instruments, and

disclosing information about them may be challenging for firms, investors, and analysts The complexity of derivatives may make it difficult for investors to assess their value and risk, leading to misinterpretation and errors in financial reporting Also, this outcome is suggestive of incomplete derivative risks information disclosure which could be misleading, or difficult to understand. It becomes unuseful to investors and analysts in assessing the firm's risk exposure, lowering financial reporting quality (Phua *et al.*, 2018). Further, suppose commercial banks engage in derivatives for risk management purposes (hedging against market risks), which is a common practice among listed banks in Nigeria. In that case, such practices may help reduce risk exposure. However, they could also lead to increased complexity in financial reporting and difficulties in measuring and disclosing the impact of derivative instruments on financial performance, resulting in lower financial reporting quality.

CONCLUSION AND RECOMMENDATION

The study concludes that financial derivative risk information disclosure leads to poor reporting quality. Generally, this study applauds the International Financial Reporting Standard for the provision of IFRS 7, which requires that listed firms disclose information relating to financial derivative usage. However, based on the findings of this study, the researcher recommended that:

Policymakers could work with regulatory bodies and standard-setting organizations to develop standardized disclosure practices for derivative instruments Standardization would improve comparability and consistency of information across firms, making it easier for investors and analysts to evaluate and compare risks associated with derivative instruments.

Policymakers could encourage or require training and education for investors and analysts on the complexities of derivative instruments and their disclosure to help them better understand the information disclosed by firms and make more informed investment decisions. Policymakers could strengthen enforcement mechanisms to ensure that firms comply with disclosure requirements and disclose complete and accurate information about derivative risks. This will go a long way to improving the quality of financial reporting and increasing investor confidence in financial markets.

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EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON EARNINGS QUALITY OF LISTED COMMERCIAL BANKS IN NIGERIA.

[1]Moses Ekaruwe, [2]Okafor, M. C. and [2]Ekwe, Michael C.
[1]Department Of Accounting, Delta State Polytechnic, Otefe – Oghara.
[2]Department Of Accounting, Michael Okpara University Of Agriculture, Umudike
Corresponding author: mosbeyy@gmail.com

ABSTRACT
The study examined the effect of audit committee characteristics on the earnings quality of commercial banks listed on the Nigeria stock exchange. It employed an ex post facto research design and extracted data from the annual reports of 14 banks from 2007 to 2022. It employed audit committee characteristics variables such as audit committee size, independence, meetings, and board size, while earnings quality was used as the dependent variable. The data collected were analyzed using panel regression analysis, and the result revealed that audit committee independence has a significant effect on earnings quality. In contrast, audit committee size, committee meetings, and board size have an insignificant effect on the earnings quality of listed commercial banks in Nigeria. Based on the findings, the study recommends that Commercial banks ensure that all the relevant audit committee attributes (such as audit size, audit independence, the board size, and audit committee meetings) are maintained to avoid any mismanagement that could be attributable to inadequate audit committee attributes. This will, in turn, improve the earnings quality of commercial banks. Furthermore, audit committee members should ensure that the credit guidelines grant facilities and sanction all erring staff for any infraction. This would help in improving the earnings quality of commercial banks.
Keywords: Audit committee characteristics, earnings quality, audit committee size, audit committee independence, audit committee meetings, board size.

INTRODUCTION

The emergence of the financial crisis in some blue chip companies and banks is associated with manipulating accounting figures and window dressing of financial statements. This raised serious questions about the role of different statutory monitoring organs in those companies instituted to promote financial reporting quality, protect investors' interests, and control excesses by top management. One of such statutory structures established by law and instituted by various companies is the audit committee. The establishment of audit committees in firms was first proposed by the Securities and Exchange Commission (SEC) and the New York Stock Exchange (NYSE) in the USA in the 1940s. However, it was only made compulsory in 1977 (Hussain & Mustafa, 2012). Dafinone (2001) noted that establishing audit committees in companies in the United States of America and Canada increased confidence in the credibility and objectivity of the financial statements, assisted directors in discharging their financial reporting responsibilities, and strengthened the independence of the external auditors.

The effectiveness of the audit committee is dependent mainly on four components: the committee's composition, authority, resources, and diligence (Hussain & Mustafa, 2012). Many professional and regulatory bodies worldwide have recommended that members of audit committees should have specific qualifications and expertise to discharge their responsibilities. Notably, after the world's major financial crisis in 2008, there has been an increase in the need to look up indicators of earnings reliability. The reality facing stakeholders in the corporate world is that financial reporting failure has been on the increase as window-dressed accounts generated concerns in the USA, leading to the collapse of several companies, some of which include Bear Stearns in N/Y City with a share value of $2.2 billion in 2008, American Southern Bank valued at $216.6 million in 2009 and MF Global with a share value of $43 billion in 2011 (Dabor &Dabor, 2015). There have been several reported cases, such as Cadbury in the United Kingdom, Sarbanes Oxley in the United States of America, Day Report in Canada, and the Vienot Report in France (Baxter & Cotter, 2009). Idornigie (2010) noted that Nigeria has a multiplicity of codes of corporate governance with distinctive dissimilarities, namely, the Security and Exchange Commission (SEC) code of corporate governance of 2003 reviewed in 2011 to guide the operation of publicly listed companies on the floor of the NSE, the Central Bank of Nigeria (CBN) code of 2006 as well as National Insurance Commission (NAICOM) code of 2009 and Financial Reporting Council (FRC) code of corporate governance, 2018. As specified by the Company and Allied Matter Act (CAMA), 1990, section 359(3) and (4), every public company is required to establish an audit committee that shall consist of an equal number of directors and representatives of the shareholders of the company. At least one board member of the committee should be financially literate and know accounting or financial management. In contrast, other members should have basic literacy and be able to read financial statements.

Including the audit committee in the corporate governance mechanism raises the expectation of shareholders, thereby leading to improved confidence predicated on perceived oversight function over the board. This ensures that the board of directors performs its functions in compliance with the globally accepted corporate governance practice, namely, accountability, fairness, responsibility, and transparency (Modum *et al.*, 2013). However, the notable failure of corporate governance in Nigeria throws substantial doubt on the effectiveness of audit committees in carrying out their role. Dabor and Dabor (2015) provided evidence of accounting choices in the corridor of audit committees in the banking sector. This is predicated on anecdotal evidence, which shows that all the failed banks in Nigeria in the last decade had excellent audited financial reports. Most of these banks declared huge profits but went underground in their financial statements a few months after these declarations. Dabor and Dabor (2015) opined that one key reason for the crisis in 2008 of banking was inadequate disclosure and transparency about the actual financial position of banks. Various terminologies have been used to describe it, such as inadequate disclosure and transparency, smoothing, and creative accounting. The issues have provoked concern among indigenous researchers. Some people have argued that the lack of a formidable audit committee was responsible for the abysmal reporting of earnings quality; others pointed out that the primary cause of this crisis was the lack of an active board (Dabor & Dabor, 2015).

The importance of audit committees in the banking sector hinges on the need to provide quality or credibility in external auditors' reports, mainly reflected through capital adequacy, earnings quality, risk assets quality, and liquidity management in reported annual reports/financial statements (CBN, 2010). The reliability of financial statements reinforces confidence amongst various stakeholders; therefore, the manipulations of any of these critical factors would lead to the erosion of confidence by customers and the investing public. Against this backdrop, this study was necessary to assess the effect of audit committee characteristics on the financial reporting quality of listed commercial banks in Nigeria.

LITERATURE REVIEW

Audit Committee

The audit committee is an arm of the organization that provides oversight of the financial reporting process, the audit process, the system of internal controls, and compliance with laws and regulations. The audit committee can expect to review significant accounting and reporting issues and recent professional and regulatory pronouncements to understand the potential impact on financial statements. Thus, an audit committee needs a specific, precise scientific definition as it differs by professional environments and interests. According to the Bank of Britain, an audit committee is a sub-committee of the board of directors responsible for following financial matters in the company and assisting the board in making financial decisions that the board may not have the time, experience, or expertise to know its details. American Institute of Certified Public Accountants (AICPA) views it as the process by which management can mitigate and curb illegal behavior used by senior management in companies.

According to Hamdan *et al*. (2013), an audit committee is the section of an organization’s board of directors that monitors its financial reporting and authenticates its accuracy. Their primary responsibility is to provide an objective and unbiased view of the organization's practices. The purpose of an audit committee comprising members from outside the organization is to ensure that the audit process is neutral by removing the conflict of interest. An audit committee is a board of advisors overseeing a company's financial reporting.

According to Investorword.com, an audit committee comprises at least three individuals overseeing a company's internal and external audit functions. In addition, at least one member must be a financial expert or have significant financial expertise. The committee is responsible for selecting and appraising independent and external firms to provide audit functions. They also oversee the process of financial reporting, including (but not limited to) supervising internal auditors, monitoring internal controls, and ensuring adequate compliance with Security and Exchange Commission (SEC) and Generally Accepted Accounting Principles (GAAP)standards. Hussain and Mustafa (2012) defined an audit committee as a group of at least three independent directors with no connection to the company management, an operating component of the board of directors responsible for internal control and financial reporting oversight. In the corporate world, an audit committee often invites members of management or others to attend committee meetings and deliberations. However, such guests do not have voting rights. In most cases, the committee's role is much more than overseeing financial reporting practices, depending on the company's size, such as legal and regulatory compliance, risk management, and corporate governance practices.

According to Almalhuf (2009), an audit committee is a selected number of a company's board of directors whose responsibilities include helping auditors remain independent of management. Most audit committees comprise three to five or sometimes as many as seven directors who are not a part of company management. The audit committee is critical in providing oversight and as a check and balance on a

company's financial reporting system. The committee provides independent review and oversight of a company's financial reporting processes, internal controls, and independent auditors. It provides a forum separate" from management in which auditors and other interested parties can candidly discuss concerns. By effectively carrying out its functions and responsibilities, the audit committee helps to ensure that management properly develops and adheres to a sound system of internal controls, that procedures are in place to assess management's practices and internal controls objectively, and that the outside auditors, through their review, objectively assess the company's financial reporting practices.

Determinants of financial reporting quality

The literature is replete with factors that affect the quality of financial statements, among which the audit committee is relatively more pronounced. The factors are as follows:

Audit committee size and earnings quality

The size of the audit committee is the number of directors appointed to be members, which could be small, medium, and large audit committees. The Blue Ribbon Committee (BRC) report 1999 released the usefulness of having an audit committee. It recommended that an effective audit committee of listed companies comprise at least three directors. Although the size of the audit committee is affected mainly by the size of the company and its board of directors, a larger audit committee may not necessarily cause more effective functioning as it may lead to unnecessary debates and delayed decisions (Lin et al., 2008). According to Abdellatif (2009), the larger the size of the audit, the more effectively the committee can mitigate asymmetric information during the seasoned equity offerings. Through earnings management, managers aim to mislead users of financial statements by providing them with false information about a company's financial position and operating performance. According to CAMA (1990), every public company must have an audit committee with a maximum of six members of equal representation by three shareholders and three directors.

The literature has different views on the relationship between audit committee size and earnings management. Nelson and Jamil (2011) examine audit committees and financial reporting quality following the government transformation program in Malaysia. Using a sample of 20 out of 33 firms from 2003 to 2009. They found a positive relationship between audit committee size and earnings management. Sharma and Kuang (2013), who studied voluntary audit committee characteristics, incentives, and earnings management in New Zealand, supported this finding. The study used a sample of 194 out of 393 firms listed in the New Zealand Stock Exchange Market for 2004. Their finding showed a significant positive relationship between audit committee size and earnings management. By contrast, a negative significant relationship was found between the size of the audit committee and earnings management practice in a study conducted by Yang and Krishnan (2005), while Xie *et al*. (2003) found no significant relationship between audit committee size and discretionary current accruals as a proxy for earnings management. The above findings lead some researchers to propose that larger audit committees are better at maintaining the financial reporting process. For instance, Beasley and Saltcrio (2001) found that as audit committee size increases, Firms are more likely to include outside directors beyond the mandated minimum requirements, enhancing audit effectiveness. As such, audit committee size constrains earnings management.

Audit committee independence and earnings quality

Prior literature provides divergent opinions on the relationship between audit committee independence and earnings management (a proxy for financial reporting quality). However, most of the studies concluded that an independent audit committee provides effective monitoring of financial statements, which was provided by the management and ensures the credibility of financial reporting. This is inconsistent with the findings of Nelson and Jamil (2012), who showed that the magnitude of audit committee independence influences earnings management. Several studies supported the negative association between audit committee independence and earnings management, including, among others. Chtourou *et al.* (2001) investigated corporate governance and earnings management using two groups of US Firms. They found that income-increasing earnings management is negatively related to a larger proportion of outside members who are not managers in other Firms. This result gave credence to the findings of Meca and Ballesta (2009), who studied corporate governance and earnings management and revealed that audit committee independence can constrain earnings management, thereby improving investors' confidence.

Contrariwise, other researchers provided no evidence to support the relationship between audit committee independence and earning management. For example, Baker and Cotter (2009) found no significant association between audit committee independence and earnings management.

This was in line with the findings of Nelson and Jamal (2011), who found a positive but insignificant relationship between audit committee independence and earnings management. Contrary to most findings of prior research in Nigeria, Fodio *et al.* (2013) found a positive significant relationship between audit committee independence and earnings

management. Their finding was consistent with that of Shah *et al.* (2009), who studied corporate governance and earnings management from Pakistani listed companies and found a positive association between audit committee independence and discretionary accruals.

Audit committee financial expertise and earnings quality

Felo et al. (2003) termed audit committee members with financial experts as members with past employment experience in finance or accounting, professional certification in accounting, or any other financial oversight experience or background that results in financial sophistication. Song and Windram (2004) suggested that a high level of financial literacy is required for the audit committee to perform its oversight function of monitoring effectively.

The role of an audit committee in overseeing the accountability of the management covers a broad scope, which includes the overall process of corporate reporting. This demands the audit committee to possess accounting knowledge to understand the financial statement and make a positive contribution that will lead to an improved financial report. The financial literacy of audit committee members will go a long way to help reduce fraud in corporate financial reporting. Formal recognition of this requirement was made in the US by including a clause in the Sarbanes-Oxley Act (2002), which stipulated that every publicly listed company disclose whether it has a financial expert on its audit committee. Previous studies showed that fraudulent financial reporting companies have few members with accounting expertise (McMullen & Raghunandan, 1996; Beasley *et al.*, 1999).

DeZoort and Salterio (2001) documented that audit committee members with accounting know-how were more likely to make better professional judgments than those without accounting experience. Abbott, Parker, and Peters (2004) noted that audit committee financial expertise reduced financial restatements or constrained the tendencies of managers to manipulate financial reports. Zhang et al. (2007) found that firms were more likely to be identified with deficiencies in internal control over financial reporting if their audit committees needed deep financial expertise. All these studies suggested that financially knowledgeable audit committee members were more likely to prevent and detect material misstatements. Cohen et al. (2000)found that experienced external auditors believed that the lack of financial expertise of audit committee members negated the committee's effectiveness. Baxter and Cotter (2009) investigated the relationship between audit committee expertise and financial reporting quality in Australia and the US. The studies found a negative relationship between audit accounting expertise and financial reporting. However, some authors reported that an audit committee flooded with accounting expertise members was less productive, given that the audit committee members need a sufficiently broad range to detect financial irregularities.

Audit committee meetings and earnings quality

The audit committee's effectiveness depends on how much it can resolve the company's issues and problems and improve its monitoring functions (Abbott et al., 2004). A more active audit committee is expected to provide an effective monitoring mechanism. The more frequently the audit committee meets, the more opportunity it has to discuss the company's current issues. A more active audit committee is expected to provide an effective monitoring mechanism. Beasley et al. (1999) suggested that audit committee meetings were not mere rituals devoid of interest to managers and auditors; instead, meaningful and substantive meetings were consistent with an agency perspective. Chen et al. (2008) observed the number of audit committee meetings as an important corporate governance mechanism. Menon and Williams (1994) suggested at least two meetings a year. This recommendation for a minimum meeting frequency to guarantee effective audit committee control was supported by empirical evidence of a positive relationship between meeting frequency and the quality of a firm's accounting information (Abbot et al., 2004; Xie et al., 2003).

Likewise, Chtourou *et al*. (2001) found that meeting more than twice a year is positively associated with earnings management. Xie *et al*. (2003) found that the frequency of audit committee meetings is negatively related to current discretionary accruals. It is argued that effective control is unlikely to occur if an audit committee holds a yearly meeting or none (Deli & Gillan, 2000; Klein, 2002). Abbott *et al*. (2004) noted that an effective Audit committee should meet at least four times annually. Considering the recommendations of practitioners like Price Water House (1993) and the findings of Beasley (1999), and Xie *et al. (*2003), several existing pieces of literature provided evidence to support insignificant relationships between audit committee meetings and earnings management (see, for example, Baxter & Cotter. 2009; Nelson & Jamil, 2012), These mixed results are required to be revisited to be able to identify the actual effect of these variables (audit committee meetings and earning quality).

Theoretical Literature

Agency theory

Agency theory was propounded by Jensen and Meckling in 1976.That theory argues that the management of most banks is detached from owners. According to Omokhudu and Omoye (2012), they see an agency relationship is a contract under which one party (the principal) engages another party (the agent) to

perform some services on their behalf, with the principal delegating decision-making authority to the agent. As such, the owners or **s**hareholders of most banks are not part of the daily operations of the organizational activities, which they look forward to to realize their goals. However, other interest groups depended on the organization to realize their goals. They may doubt what the management may present as a report of the organization's performance for reliance.

According to Onyekwelu and Ugwuanyi (2014), the stakeholders need a confirmation report in the form of assurance by an independent party known as the external auditor. Likewise, customers need the assurance of external auditors who are greatly dependent upon them since they are expected to adopt the attitude of professional skepticism. This suggests that even though the auditors are not mainly finding fraud in the financial report, they should recognize the possibility of its existence. This is one of the pronouncements in ISA 240, further made stronger and actionable by introducing the SOX Act of 2002. Thus auditors are bound or liable within the limits of the statutory requirements contrary to the perception of the Stakeholders. The expectation gap is the divergence between these perceptions of both parties and the statutory requirement. Unarguably, stakeholders look up to external auditors as ones with professional competence and whose advice or opinion is held sacrosanct for investment decisions (Onyekwelu & Ugwuanyi, 2014).

Stewardship theory

Stewardship theory was propounded by Donaldson and Davis in 1989. Stewardship theory has its roots in psychology and sociology, and it stresses the role of top management as stewards, integrating their goals as part of the organization as opposed to the agency theory perspective. The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. It hinged on a model of man where a steward perceives greater utility in cooperative, pro-organizational behavior than in self-serving behavior; the theory assumes a strong relationship between organizational success and a principal's satisfaction. Hence, a steward overcomes the trade-off by believing that working towards organizational, collective ends also meets personal needs.

The theory recognizes the importance of structures that empower the steward and offer maximum autonomy built on trust. In order to protect their reputations as decision-makers in organizations, executives, and directors are inclined to operate the firm to maximize financial performance and shareholders' profits. The firm's performance is believed to impact perceptions of its performance directly.

The theory also holds that managers have similar interests to the corporation in that the careers of each are linked to the attainment of organizational objectives, and their reputations are interwoven with the firm's performance and shareholder returns. Therefore, the theory helps explain the relationship between audit committees and the quality of financial reporting. If the audit committee fails to check the steward (management), self-interests will overrun the organization's interests, hence fraudulent financial reporting

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METHODOLOGY

The study adopted an ex post facto research design by using a combination of cross-sectional and time series data from annual reports of banks listed on the Nigerian Stock Exchange. The study population consisted of the 14 commercial banks listed on the Nigerian Stock Exchange (NSE) floor. Using simple random sampling, 10 listed banks were selected. As corporate governance and audit committee, variables are mainly secondary data obtained from the annual reports of the sampled deposit money banks from 2007 to 2022.

The purpose of these data is to establish the relationship between audit committee characteristics and the credibility of auditors' reports during the post-consolidation period of the banking sector. The study, therefore, used panel data regression analysis, which involves the determination of fixed effect regression, random effect regression, and the Hausman test.

Model Specification

ENQ = f (ACSZ, ACID, ACMT, BDSZ)

In applying the stochastic form, the model is formulated as follows;

$ENQ_{it} = \beta 0 + \beta 1ACSZ_{it} + \beta 2ACID_{it} + \beta 3ACMT_{it} + \beta 4BDSZ_{it} + U_{it}$

Where:

ENQ = Earnings Quality

ACSZ = Audit committee size

ACID = Audit committee independent

ACMT = Audit committee meeting

BDSZ = Board size

β0 = Intercept term

β1-β5 = Slope coefficients

U = Residual term

I = Cross section of banks

T = Time period
Our a priori expectation is that less inference audit committee would improve earnings management, capital adequacy to maintain long-term solvency, risk assets quality, and liquidity management to enhance short-term liquidity.

RESULTS AND DISCUSSIONS

Regression of the estimated model summary

Table 1: Effect of audit committee characteristics on earnings quality of listed deposit money banks in Nigeria.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12.56922	14.57770	-0.862222	0.3899
ACSZ	0.044233	2.214007	0.019978	0.9841
ACID	26.01978	9.753142	2.667835	0.0084
ACMT	0.631628	1.470837	0.429434	0.6682
BDSZ	-0.001799	0.123244	-0.014596	0.9884
R-squared	0.046048	Mean dependent var		2.475313
Adjusted R-squared	-0.021430	SD dependent var		7.277376
SE of regression	7.198976	Sum squared resid		8032.915
F-statistic	1.870500	Durbin-Watson stat		0.738495
Prob(F-statistic)	0.118330			

Source: E-View Output

Table 1 presents the regression result between ACSZ, ACID, ACMT, BDSZ, and ENQ. From the model summary table above, the following information can be distilled.

The R^2, which measures the level of variation of the dependent variable caused by the independent variables, stood at 0.046048. The $R^{2,}$ otherwise known as the coefficient of determination, shows the percentage of the total variation of the dependent variable (ENQ) that can be explained by the independent or explanatory variables (ACSZ, ACID, ACMT, & BDSZ). Thus, the R^2 value of approximately 0.046 indicates that 4.6% of the variation in the ENQ of listed deposit money banks can be explained by a variation in the audit committee characteristics. In comparison, the remaining 95.4% (i.e., 100-R^2) could be accounted for by other factors not included in this model, like the bank's corporate governance mechanism.

The adjusted R^2 of approximately 0.021 indicates that if other factors are considered in the model, this result will deviate from it by only 0.025 (i.e., 0.046 – -0.021). This result shows that there will be a further deviation of the variation caused by the independent factors to be included by 2.5%.

The regression result in Table 4 above to determine the relationship between ACSZ, ACID, ACMT, BDSZ, and ENQ shows that when all the independent variables are stationary, the ENQ variable is estimated at -12.15922. This implies that when all independent variables are held constant, there will be a decrease in the *ENQ* of listed deposit money banks up to 12.16%, occasioned by factors not incorporated in this study. Thus, a unit increase in ACSZ will lead to an increase in ENQ by 0.044%. Also, a unit increase in ACID will lead to an increase in ENQ by 26%. Furthermore, a unit increase in ACMT will lead to an increase in ENQ by 0.63%. Also, a unit increase in BDSZ will lead to a decrease in ENQ by 0.0018%.

Finally, the result shows an insignificant variation of Fisher's statistics (1.870500) at 0118330, which means the model as a whole is statistically insignificant at an autocorrelation level of 0.738 (Durbin-Watson).

Audit committee size has a T-value of0.019978 with a P-value of 0.9841, greater than 5% (0.05), implying that audit committee size has no significant effect on the earnings quality of listed deposit money banks in Nigeria. Audit committee independence has a T-value of 2.667835 with a P-value of 0.0084, less than 5% (0.05), implying that audit committee independence significantly affects the earnings quality of listed deposit money banks in Nigeria. In addition, audit committee meetings has a T-value of0.429434 with a P-value of 0.6682, which is greater than 5% (0.05), which implies that audit committee meetings has no significant effect on the earnings quality of listed deposit money banks in Nigeria.

More so, board size has a T-value of-0.014596 with a P-value of 0.9884, which is greater than 5% (0.05), which implies that audit committee meetings has no significant effect on the earnings quality of listed deposit money banks in Nigeria.

Discussions On Findings

Effect of audit committee characteristics (ACSZ, ACID, ACMT, & BDSZ) on earnings quality of listed deposit money banks in Nigeria.

The findings of objective one revealed that Audit committee characteristics (ACSZ, ACID, ACMT, & BDSZ) have no significant effect on the earnings quality of listed deposit money banks in Nigeria. The finding is consistent with the findings of Akanbi (2022), who examined the effect of audit committee attributes and financial reporting quality of selected quoted consumer goods firms in Nigeria. The Hausman test was conducted to determine which model is appropriate for fixed and random effects. The result of the Hausman test revealed that the fixed-effects model is appropriate as indicated by prob. (0.0181) less than a 5% significance level. The study concluded that audit committee characteristics statistically insignificantly influenced the quality of financial reporting.
On the contrary, Ayinla et al. (2022) investigated the influence of audit attributes on the financial reporting quality of twelve (12) listed Deposit Money Banks in Nigeria from 2012 to 2018. The study used a correlational research design. The panel data regression results demonstrated that audit committee independence and expertise had a favorable and significant impact on the financial reporting quality of Nigerian-listed DMBs. As a result of the study's findings, audit committee independence and audit committee expertise have a significant propensity to enhance financial reporting quality.

CONCLUSION AND POLICY IMPLICATIONS

The study was conducted on the effect of audit committee attributes on the financial performance of listed commercial banks in Nigeria. The attributes of an audit committee include the independence of the audit committee, the size of the audit committee, and the number of meetings held by audit committee members. These audit committee attributes can affect the level of performance of commercial banks in terms of their return on assets, return on equity, earnings per share, and profit after tax. The essence of the audit committee is to ensure an accurate and fair view of information in the financial statement and detection of fraud that can hamper the performance of commercial banks. Based on the analysis, the study concludes that audit committee attributes can affect the performance of commercial banks, especially in earnings per share and profit after tax. The study engaged OLS regression analysis. The OLS regression revealed results that have implications for the banking sector, regulatory authorities, professional bodies, and researchers. The findings revealed that audit committee characteristics proxies have varied individual relationships with each dependent variable, some contrary to our a priori expectation. Hence, the study postulates that the individual characteristics of the audit committee are not mutually exclusive, as the findings proved that the joint variables of audit committee characteristics significantly affect earnings quality. This implies that an effective and efficient audit committee should comprise members, including those with knowledge of accounting and finance, and that there should be regular meetings without interference from the board of directors to execute their functions. It was observed that an efficient and effective audit committee enhances the quality of earnings in banks but that other variables account for the total variation of earnings quality in the sampled banks of up to 86%. Other variables influencing earnings quality might be a dynamic corporate governance structure that promotes transparency, accountability, fairness, and a socially responsive business environment. However, the study established that the audit committees of the sampled banks are practical and efficient in a manner that ensures healthy long-term solvency. These variables, amongst others, may be efficient and effective corporate governance structure, efficient risk assets management unit, adherence to the bank's credit guidelines, the borrowers' character, nature of the borrower's business, cost of funds, and the prevailing economic conditions. It was also established that audit committee characteristics have an insignificant effect on the earnings quality and capital adequacy of banks in Nigeria. At the same time, the risk assets ratio and liquidity ratio were significant.
Therefore, the study recommends that commercial banks ensure that all the relevant audit committee attributes (such as audit size, audit independence, board size, and audit committee meetings) are maintained to avoid any mismanagement that could be attributable to inadequate audit committee attributes. This will, in turn, improve the earnings quality of commercial banks. Also, audit committee members should ensure that the credit guidelines grant facilities and sanction all erring staff for any infraction. This would help in improving the earnings quality of commercial banks.

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CORPORATE ATTRIBUTES AND FINANCIAL DISCLOSURE OF BUILDING MATERIAL COMPANIES IN NIGERIA.

Nnam, H.I., Nwaorgu, I.A., Azubike, J.U.B. and Nmesirionye, J.A.
Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.

ABSTRACT
The study focused on corporate attributes and financial disclosure of building material companies in Nigeria. An ex-post facto research design was adopted, and data was obtained from the annual reports of twelve (12) building material companies at the first-tier market of the Nigerian Stock Exchange (NSE) within the period ranging from 2013 to 2019. The data collected were analyzed using panel data multiple regression analysis. The finding revealed that Corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on overall disclosure, mandatory disclosure and voluntary disclosure index of building material companies in Nigeria. The study recommends, among others, that The Financial Reporting Council of Nigeria (FRCN), the Securities Exchange Commission (SEC), the Nigerian Stock Exchange (NSE), and other regulatory agencies take appropriate actions to guarantee comprehensive disclosure in accordance with relevant international accounting disclosure rules. An improvement in the quality of information disclosure will enable consumers to make informed predictions and evaluate the company's progress, which will invariably support stock market growth. Also, to protect the interests of the various user groups, effective enforcement programs should be implemented.
Keywords: Corporate attributes, firm size, profitability, leverage, age and financial disclosure.

INTRODUCTION
Business entities are associated with specific corporate attributes which impact their performance either positively or negatively. These attributes also affect corporate information disclosure. Corporate attributes are attributes such as firm size, leverage, liquidity, capital, firm age, dividend, market share, off-balance sheet activities, and operating expenses, among others, that affect the operations of a firm. Firm attributes refer to firm characteristics or specific features that distinguish one company from another. Firm attributes are numerous; it could be the size, profitability level, leverage level, industry type, geographical location, nature of the business, corporate governance mechanism and any other feature that distinguishes one company from the other (Dogan, 2013). These features commonly influence company decisions and information disclosure (Dogan, 2013).
Most business entities use debt to finance their operations with the hope of improving their performance. By doing so, a company increases its leverage level because it can invest in business operations without increasing its equity. Leverage is the amount of debt used to finance firms' assets and other capital expenditures that can improve firms' performance (Lin *et al.*, 2006). Tudose (2012) posits that leverage disciplines managers, as the debt level may be used to monitor managers. Thus, increasing leverage components of a firm's capital structure may increase the level of efficiency, thereby influencing the company's decision and information disclosure.
Company managers who are able to identify the level of leverage as a component of the firm's capital structure are rewarded by reducing the firm's cost of finance, thereby maximizing the firm's revenue (Zeitun & Tian, 2007). From creditors' points of view, debt to equity may help in understanding firms' risk management strategies and how firms determine the likelihood of default associated with firms' information disclosure.
Firm size is also expected to influence information disclosure (Dogan, 2013). Large firms may exercise economies of scale, have good knowledge of markets and are capable of employing competent managers for reliable information disclosure (Driffield *et al.*, 2005). However, large firms can be less efficient than smaller ones because of the loss of control by managers over strategic and operational activities (Williamson, 1967, cited in Aluwoung and Fadio, 2019). In addition, the amount of cash a company has at hand or can generate quickly reveals how healthy the company is financially.
The issue of corporate disclosures has been widely discussed in recent years, mainly due to financial crises and the need for an effective corporate governance system. Several reasons have been advanced as to why corporate firms should disclose more information in financial reports and also capture it in theories like stakeholder theory, agency theory, legitimacy theory, and political economy theory (Choi, 1973 cited in Rotich, 2017). The agency theory implies that companies increase disclosure in order to reduce conflicts between principals (shareholders) and agents (managers). In addition, companies aiming to increase their value may do so by increased disclosure (Lobo, 2001). Several studies have mentioned that improved disclosure reduces the gap between management and outsiders, enhances the value of stock in the capital market, increases liquidity and reduces the cost of capital (Apostolos, 2009, cited in Nahiba, 2020).

The fall of Enron in the United States and other multinational corporations created the need for broader recognition of corporate transparency and disclosures (Akhtaruddin, 2005). The information corporate entities determine corporate transparency disclosed in their financial report. Accurate, relevant and reliable disclosures are seen as means of enhancing corporate image, reducing the cost of capital, and improving the marketability of shares. High-quality accounting information facilitates the acquisition of short and long-term funds and also enables management to account for the resources put in their care properly. Thus, it acts as a significant spur to the growth and development of money and capital markets, which are fundamental to the smooth running of any economy. Meek *et al*. (1995 cited in Hossain 2019) submit that the effective functioning of capital markets, however, significantly depends on the adequate flow of information between the company and its stakeholders. It is against this backdrop that this current study examines the effect of corporate attributes (firm size, profitability, leverage, firm age) on mandatory and in voluntary disclosure of companies in Nigeria.

LITERATURE REVIEW

Financial statements and information disclosure

Financial statements of Nigerian companies are regulated by the requirements of the Financial Reporting Council of Nigeria (FRCN) through the adoption of its pronouncements referred to as International Financial Reporting Standards (IFRS). The disclosure requirements of this Standard (IAS/IFRS) define the way accounting information should be presented in financial statements. Other voluntary disclosures, which are discretionary accounting information, over and above the mandatory disclosures, are also provided by management. The financial statements provide valuable information for different stakeholders. The primary objective of financial statements is to provide information about the financial position, performance, and changes in the financial position of an enterprise (Elliot & Elliot, 2005). According to Meigs and Meigs (1993), financial statements are the principal means of reporting general-purpose financial information to users. There are several users – managers, investors, suppliers, customers, lenders, employees, government and the general public - who have a vested interest in these financial statements (Glautier & Underdown, 1997; Lewis & Pendrill, 2000; Werner & Jones, 2003; Sutton, 2004; Elliot & Elliot, 2005; IASB, 2006). The accounting data presented in the financial statements must be relevant and meaningful to the user (Omolehinwa, 2000).

With the literature review in this chapter, a conceptual framework for this study is developed by exploring the relationship between the dependent variable, overall disclosure index (ODI = MDI + VDI) and explanatory variables (company size, profitability, leverage, listing age, industry type, auditor size and multinational affiliation).

Corporate attributes and financial disclosure

Company size is the most consistently reported significant corporate attribute in previous empirical studies (Street & Bryant, 2000; Meek *et al*., 1995). According to Owusu–Asah (1998), theory, intuition, and empirical studies suggest that size positively influences mandatory disclosure practices. On the other hand, Wallace *et al.* (1994) admit that although there is overwhelming support for a positive relationship between firm size and level of disclosure, the theoretical basis is unclear. The direction can be positive or negative. On the positive, it can be argued that since large companies usually operate over vast geographical areas, deal with multiple products and have several divisional units, they are likely to have a well-built information system that enables them to track all financial and non-financial information for operational, tactical and strategic purposes. With this type of well-structured internal reporting system, the incremental costs of supplying information to external users will be minimized. This will make them disclose more information than their smaller counterparts.

Watts and Zimmerman (1990) argue that larger companies are likely to show more information in order to improve the confidence of stakeholders and to reduce political costs. Generally, large firms disclose more information than smaller ones (Meek *et al*., 1995). On the other hand, large firms are also visible and susceptible to political attacks in the form of pressure for the exercise of social responsibility, greater regulation such as price control and higher corporate taxes. Firms may react to this political action by avoiding attention, which disclosure of some significant facts could have brought to them. Therefore, large firms need to disclose more detailed information in their annual reports to avoid attention (Wallace *et al.,* 1994; Wallace & Naser, 1995).

Theoretical Framework

The positive accounting theory (PAT)

Positive Accounting Theory (PAT) came into being in the mid-1960s. It stemmed from the works of the famous theorist Fama in the 1960s, particularly the work that related to the Efficient Markets Hypothesis (Deagan, 2004). 'Positive' Accounting theory was popularized with the works of Gordan (1964). He argued that senior management was likely to manipulate the information in the financial statements in its favour by selecting accounting procedures that maximize their utility. Afterwards, several attempts were

made to provide a positive theory of financial reporting (Jenson & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1978). They tried to explain why accountants do what they do and explained its effect on people and resource allocation.

'Positive' Agency theory was developed and utilized by Jensen and Meckling (1976) to analyze the relationship between the owners of the organization and the managers within the nexus of the contract. Prior to this period, Italian Professor Aldo Amaduzzi 1949 published a book entitled *Conflitto ed equilibrio di interessi nel bilancio dell'impresa*' (translated as Conflict and Equilibrium of Interests in Corporate Financial Statements), in which he analyzed financial statements and their contents as the equilibrium outcome of a conflict of interests between different corporate stakeholders. Due to the language barrier, his work was not considered mainstream (Melis, 2007).

'Positive' Agency theory is concerned with resolving the problems that can occur in agency relationships (Jensen & Meckling, 1976). They define an agency relationship as a contract under which the owners of the organization (principal(s)) engage the manager (agent) to perform some service on their behalf. Under this arrangement, the owners delegate some decision-making authority to the manager. It is presumed that both parties are utility maximizers with varying philosophies, and this could result in divergent and misaligned interests between them. Owners would want to maximize the net present value of the firm, while the managers would want to maximize utility, of which income is part.

In most cases, the agent will only sometimes act in the best interests of the principal. The agents could also hide information for selfish purposes by non-disclosure of essential facts about the organization (Barako *et al.*, 2006). Owners face moral dilemmas because, most times, they cannot ascertain or evaluate the decisions made by their agents (Barako, 2007). This conflict of interest results in an "agency problem", a.k.a. "principal-agent problem", whose resolution incurs agency costs (Al-Shammari, 2005). Jensen and Meckling (1976) and Jensen (1983) acknowledged that agency problems are common to all organizations, and they exist in all corporative efforts at each level of management in firms. This includes public organizations, private organizations, not-for-profit organizations such as schools, hospitals, and foundations, as well as governmental enterprises and bodies such as the federal, state and local governments. Jensen and Meckling (1976) focused exclusively on the positive aspects of the agency relationship as it applies to corporations. That is, it is essential to structure the contractual relationship between the owner and manager to induce the manager to make choices that will maximize the owner's welfare, given that uncertainty and imperfect monitoring exist.

Positive accounting theory has a direct bearing on the research topic. In this research, accounting disclosure presents an excellent opportunity to apply positive agency theory. This is premised on the fact that managers (agents) have better access to the company's accounting information and can communicate credible and reliable information to the market to optimize the value of the firm.

Empirical Review

Nor, Bahari *et al.* (2020) examined the impact of firm characteristics on mandatory corporate disclosures. The company has an incentive to make mandatory disclosures. One is to show that the company has better performance than other companies. This study aims to determine what characteristics of the company that influence the mandatory disclosure. This research was conducted using a sample of annual financial reports from 207 companies listed on the Indonesian Stock Exchange (IDX) in 2017 and OLS analysis techniques. The results prove that managerial ownership, foreign ownership, profitability and industry type affect the level of mandatory corporate disclosure. Consistent with initial predictions, high managerial ownership establishes management position and reduces public disclosure demands. As a result, it reduces the level of mandatory disclosure.

On the other hand, high foreign ownership encourages management to make better mandatory disclosures to meet the demands of foreign investors. A high level of profitability also encourages better mandatory disclosure to show the performance to the market in order to get investors. The demand for comprehensive reporting in the financial industry sector also encourages better mandatory disclosure.

Chandok *et al.* (2020) examined the influence of some selected corporate attributes on financial disclosures using univariate, bivariate and multivariate analysis. In the empirical model, financial disclosure (ODI) has been used as the dependent variable, and corporate attributes have been used as independent variables. The empirical result reveals that profitability, multi-listing, earning per share, internationality and international link of the audit firm have a significant influence on the financial disclosures. Contrarily, asset size, number of shareholders, year of listing, ownership structure, market category, audit fee, and leverage do not have any significant influence on the disclosure level. This provides a sign of dissimilarities in financial reporting among the companies due to corporate attributes. Consequently, the conflict of interest between shareholders and the board of directors (BOD) has been increasing gradually. In order to minimize the conflict of interest between shareholders and BOD and also to reduce the deviation of financial disclosures in the corporate annual reports, the study recommends several ways, such as examining the legal and professional frameworks of accounting and auditing continuously, setting up a

Financial Reporting Council (FRC), monitoring compliance of accounting standards and corporate governance guidelines, campaigning against the danger of preparing a discretionary financial report, and finally training of BOD members on corporate governance and corporate ethics. Ahmad *et al.* (2019) examined the effect of firm characteristics on the environmental reporting practices of listed manufacturing firms in Nigeria. The population of the study comprises sixty-one (61) manufacturing firms with a sample size of 29 firms drawn using a judgmental sampling technique. Data were gathered using annual reports and accounts of the sampled firms through content analysis and analyzed using multiple regression techniques. The study found that the firm characteristics of firm size, leverage, return on assets and firm age have significant and positive effects on the environmental reporting practices of listed manufacturing firms in Nigeria. Based on the findings, the study recommends that listed manufacturing firms should be raising fresh funds by retaining a good portion of their profits for the acquisition of assets to enhance environmental reporting practices in Nigerian listed manufacturing firms.

Hossain (2019) examined the impact of firm-specific characteristics on corporate financial disclosures amongst UAE companies. A total of 153 public, joint-stock companies, listed and unlisted, were incorporated at the time of the study. Both descriptive statistics and multiple regression analyses are used to test the relationship between the characteristics of UAE firms and the extent of their financial disclosure. Eight hypotheses were established to examine the relationship between a number of explanatory variables (namely, type of industry, listing status, return on equity, liquidity, market capitalization, foreign ownership, non-executive directors, and audit committee) and the extent of disclosure in corporate annual reports. The results of this study show that listing status, industry type, and size of firm are found to be significantly associated with the level of disclosure. This finding not only provides support for previous studies but also is of relevance to those in the UAE who want to understand corporate disclosure and should also be of interest to UAE user groups. Conclusions drawn from this study may interest policymakers and regulators who want to improve corporate financial disclosure in their countries.

Abeywardana and Panditharathna (2019) examined the extent of voluntary disclosure level and its determinants. In order to achieve these objectives, the study developed a voluntary disclosure index including 83 items and nine subcategories, which included this index analyzed by employing content analysis in the annual reports of quoted public banking and finance companies from 2012 to 2015. Furthermore, this study analyzes the selected variable to identify the determinants of voluntary disclosure level by employing panel data analysis. The study found that disclosures about general information, corporate environment, financial performance and risk management have more than 61% level. Corporate strategy, forward-looking information, human and intellectual capital, competitive environment and outlook and corporate social responsibility information had less than 45% average in 2015. There is much room for improvement in the context of voluntary disclosures. Furthermore, the study found that firm size, profitability, firm age, leverage and board independence are determinants of voluntary disclosure level and among them, firm size, profitability and firm age have a positive relationship and leverage and board independence have a negative relationship. Lundberg and Åhman (2019) examine the quality of the disclosure IAS 1 Presentation of Financial Statements, paragraphs 122 and 125 in the annual reports of Swedish publicly listed firms. A quantitative research approach is used, and the sample consists of 1,519 annual reports over 7 years. They constructed a disclosure index to assess the quality of the disclosures in Critical judgements and key sources of estimation uncertainty (IAS 1:122 and 1:125) note and categorize the annual reports into four index groups. Additionally, the number of headlines in the note is counted and sorted into three other groups, creating a headline index. Lastly, they multiply the disclosure index with the headline index to get a score, which then enables the study to distinguish and rank the quality of disclosure between firms. Further, they counted the number of words in each disclosure in each annual report. This additional quantitative data enables regression analyses, further ensuring objectivity in assessing the disclosure quality. It was found that firms in Sweden, on an average of 45%, disclose financial information in line with IAS. Sulong (2015) also reported that corporate governance disclosure (CGD) using the disclosure index by GRI G4 did not correlate with the financial performance of firms.

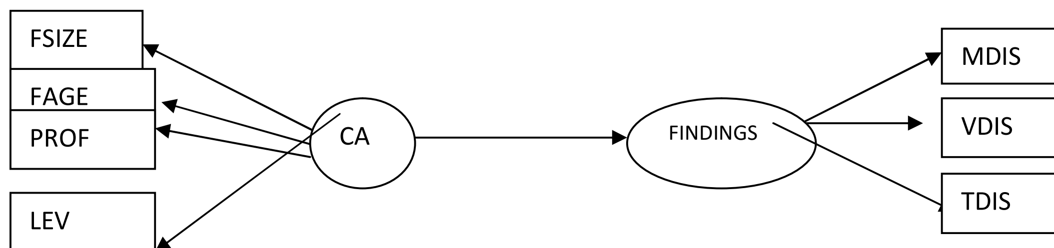
Gunawan *and* Lina (2019) examined the influence of mandatory disclosure and voluntary disclosure on investor reaction to either partial or simultaneous market ratios of firms. The study was conducted on 38 manufactured companies listed on the Indonesian Stock Exchange. There are five variables: mandatory disclosure, voluntary disclosure as the independent variable, cash flow operating activities (AKOp), cash flows investing activities (AKIn), and cash flows financing activities (AKDa) as the control variable, and the investor reaction was measured by using trading volume activity as the dependent variable. The result indicates that mandatory disclosure partially affects the investor reaction. Mandatory disclosure and voluntary disclosure simultaneously affect the investor's reaction. Limitations are mandatory disclosure, voluntary disclosure, cash flow operating activities (AKOp), cash flow investing activities (AKIn), and cash flow financing activities (AKDa), which are less able to measure the volume of stock trading

prediction of the future. Aljifri *et al.* (2019) provided empirical evidence of the impact of firm-specific characteristics on corporate financial disclosures amongst UAE companies. A total of 153 public, joint-stock companies, listed and unlisted, were incorporated at the time of the study. Both descriptive statistics and multiple regression analyses are used to test the relationship between the characteristics of UAE firms and the extent of their financial disclosure. Eight hypotheses were established to examine the relationship between a number of explanatory variables (namely, type of industry, listing status, return on equity, liquidity, market capitalization, foreign ownership, non-executive directors, and audit committee) and the extent of disclosure in corporate annual reports. The results of this study show that listing status, industry type, and size of firm are found to be significantly associated with the level of disclosure. This finding not only provides support for previous studies but also is of relevance to those in the UAE who want to understand corporate disclosure and should also be of interest to UAE user groups. Conclusions drawn from this study may interest policymakers and regulators who want to improve corporate financial disclosure in their countries. Basuony and Mohamed (2016) examine the determinants and characteristics of voluntary Internet disclosures by listed companies in Oman. The study uses archival data from listed companies on the Muscat Securities Market (MSM). Binary Logistic Regression analysis is used to examine the determinants of Internet financial reporting. The results of this study reveal that ROA is one of the factors that impact Internet financial reporting. Also, the results reveal that ownership concentration has a negative effect on Internet financial disclosure. The study provides insights into corporate internet disclosures in the GCC countries that will benefit all stakeholders with an interest in corporate reporting in this critical region of the world.

METHODOLOGY

This study made use of an ex-post facto research design. The population consists of all the twelve (12) building material companies in the first-tier market of the Nigerian Stock Exchange (NSE) within the period ranging from 2013 to 2019. The firms include Austin Laz, Berger Paints Plc, Beta Glass Plc, Bua Cement Plc, CAP plc, Cutix Plc, Dangote Cement plc, Greif Nigeria Plc, Lafarge Africa Plc, Meyer Plc, Portland Paints and Premier Paints.

Data was sourced from annual audited reports and IASs/ IFRSs issued by the International Accounting Standard Board (IASB), while Structural Equation Modeling (SEM) was employed in this study. The SEM captured both the measurement model and the structure model. The SEM is specified as follows:



Measurement model

ODI$_{it}$ = $B_0 + B_1 LogFSIZE_{it} + B_2 LogFAGE_{it} + B_3 LogPRO_{it} + B_4 LogLEV_{it} + u$ -- **(1)**
MDI$_{it}$ = $B_0 + B_1 LogFSIZE_{it} + B_2 LogFAGE_{it} + B_3 LogPRO_{it} + B_4 LogLEV_{it} + u$ -- **(2)**
VDI$_{it}$ = $B_0 + B_1 LogFSIZE_{it} + B_2 LogFAGE_{it} + B_3 LogPRO_{it} + B_4 LogLEV_{it} + u$ -- **(3)**

Structure model

FINDIS = $\mathbf{B_0} + \mathbf{B_1}CA + u$ ------- **(4)**

In the measurement model, FSIZE stands for Firm size; FAGE stands for Firm age; PROF stands for Profit after tax; LEV stands for Leverage; MDI stands for Mandatory disclosure; VDI stands for Voluntary disclosure, ODI stands for Total disclosure.

In the structure model, CA stands for Corporate Attributes, and FINDIS stands for Financial Disclosure.

Data analysis techniques

The data for the dependent and independent variables were captured from the annual audited financial statements and collated with the aid of Microsoft Excel 2010. The gathered data were scrutinized and analyzed by employing structural equation modelling using Smart PLS version 3.3.3. Univariate, bivariate and multivariate analyses were employed in exploring the secondary data. The univariate statistics of mean, median, standard deviation, minimum, and maximum were used to describe the patterns of data.

RESULT AND DISCUSSION

The data for this study is based on the variables for dependent and independent variables. Firm size (FSIZE), firm age (FAGE), leverage and return on equity (ROE) were the proxies for the independent variables (components of corporate attributes). At the same time, the overall disclosure index (ODI), voluntary disclosure index (VDI), and mandatory disclosure index (MDI) were used as proxies for the dependent variable. The data for the variables are shown in the appendix 2.

Data Analysis

Hausman Test for Hypothesis one

Table 1

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.383448	4	0.4958

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOGFSIZE	0.046401	0.021021	0.001875	0.5578
LOGFAGE	-0.195759	-0.015317	0.013657	0.1226
LEVERAGE	-0.000374	-0.000240	0.000000	0.2380
ROE	-0.013316	-0.009563	0.000229	0.8040

The Hausman test is used to differentiate between the fixed effects model and the random effects model in panel data. In this case, the random effect is preferred under the null hypothesis due to higher efficiency, while under the alternative, fixed effects are at least as consistent and thus preferred. In this case, random effect panel data is preferable. This is so because the null hypothesis was rejected (a p-value of 0.4958 is more significant than 0.05).

Panel Data Test

Table 2

Dependent Variable: ODI
Method: Panel EGLS (Cross-section random effects)
Date: 08/14/21 Time: 11:47
Sample: 2013 2019
Periods included: 7
Cross-sections included: 12
Total panel (unbalanced) observations: 83
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.494087	0.149564	9.989632	0.0000
LOGFSIZE	0.021021	0.019849	1.059059	0.2928
LOGFAGE	-0.015317	0.056028	-0.273383	0.7853
LEVERAGE	-0.000240	0.000158	-1.516226	0.1335
ROE	-0.009563	0.011599	-0.824501	0.4122

Effects Specification	SD.	Rho
Cross-section random	0.062401	0.2846
Idiosyncratic random	0.098941	0.7154

Weighted Statistics			
R-squared	0.054733	Mean dependent var	0.825834
Adjusted R-squared	0.006258	SD dependent var	0.099281
SE of regression	0.098528	Sum squared resid	0.757211
F-statistic	1.129094	Durbin-Watson stat	1.448683
Prob(F-statistic)	0.348983		

Unweighted Statistics			
R-squared	0.081163	Mean dependent var	1.600000
Sum squared resid	0.978929	Durbin-Watson stat	1.120571

The panel data results show the effect of corporate attributes on the overall disclosure of building material firms in Nigeria. The coefficient of determination R-square of 0.0547 implied that 5.7% of the sample variation in the dependent variable overall disclosure index (ODI) is explained or caused by the explanatory variables corporate attributes (FSIZE, FAGE, LEVERAGE and ROE) while 94.3% is unexplained. This remaining 94.3% could be caused by other factors or variables not built into the model. The value of the R-square is an indication of a positive relationship between the dependent variable (ODI) and independent variables (FSIZE, FAGE, LEVERAGE and ROE). The F-statistic was also used to test the overall significance of the model. The F-value of 1.129094 with a p-value of 0.348983 is an indication that the model is not statistically significant at a 5 per cent level of significance. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 1.448683 falls outside the conclusive region of the Durbin-Watson partition curve. Hence, there is no sign of autocorrelation.

Hypothesis one

$H0_1$: Corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on the overall disclosure index of building material companies in Nigeria.

The F-statistic is 1.129094 with a p-value of 0.348983 level of significance. Since the probability of the F statistics is more significant than a 5% level of significance, we would accept the null hypothesis, H_0 and therefore conclude that corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on overall disclosure index of building material companies in Nigeria**.**

Hausman fest for Hypothesis two

Table 3

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.495057	4	0.3431

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOGFSIZE	0.019829	0.003319	0.000159	0.1907
LOGFAGE	-0.107861	-0.041184	0.001168	0.0511
LEVERAGE	-0.000057	-0.000023	0.000000	0.2349
ROE	-0.000813	-0.000993	0.000017	0.9649

The Hausman test is used to differentiate between the fixed effects model and the random effects model in panel data. In this case, the random effect is preferred under the null hypothesis due to higher efficiency, while under the alternative, fixed effects are at least as consistent and thus preferred.

In this case, random effect panel data is preferable. This is so because the null hypothesis was accepted (a p-value of 0.3431 is more significant than 0.05).

Data analysis for hypothesis two

Table 4

Dependent Variable: MDI
Method: Panel EGLS (Cross-section random effects)
Date: 08/14/21 Time: 11:41
Sample: 2013 2019
Periods included: 7
Cross-sections included: 12
Total panel (unbalanced) observations: 83
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.009459	0.065507	15.40993	0.0000
LOGFSIZE	0.003319	0.009227	0.359740	0.7200
LOGFAGE	-0.041184	0.025307	-1.627371	0.1077
LEVERAGE	-2.28E-05	5.71E-05	-0.398418	0.6914
ROE	-0.000993	0.004743	-0.209256	0.8348

Effects Specification			SD.	Rho
Cross-section random			0.037437	0.5707
Idiosyncratic random			0.032468	0.4293

Weighted Statistics			
R-squared	0.033148	Mean dependent var	0.305483
Adjusted R-squared	-0.016434	SD dependent var	0.033196
SE of regression	0.032577	Sum squared resid	0.082780
F-statistic	0.668550	Durbin-Watson stat	1.450123
Prob(F-statistic)	0.615743		

Unweighted Statistics			
R-squared	-0.069073	Mean dependent var	0.975542
Sum squared resid	0.169609	Durbin-Watson stat	0.707754

The panel data results show the effect of corporate attributes on mandatory disclosure of building material firms in Nigeria. The coefficient of determination R-square of 0.033 implied that 3.3% of the sample variation in the dependent variable mandatory disclosure index (MDI) is explained or caused by the explanatory variables corporate attributes (FSIZE, FAGE, LEVERAGE and ROE) while 96.7% is unexplained. This remaining 96.7% could be caused by other factors or variables not built into the model. The value of R-square is an indication of the positive but shallow relationship between the dependent variable (MDI) and independent variables (FSIZE, FAGE, LEVERAGE and ROE). The F-statistic was also used to test the overall significance of the model. The F-value of 0.668550 with a p-value of 0.615743 is an indication that the model is not statistically significant at a 5 per cent level of significance. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 1.450123 falls outside the conclusive region of the Durbin-Watson partition curve. Hence, there is no sign of autocorrelation.

Hypothesis two

$H0_2$: Corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on the mandatory disclosure index of building material companies in Nigeria.

To test the hypothesis:

The F-statistic is 0.668550 with a p-value of 0.615743 level of significance. Since the probability of the F statistics is more significant than a 5% level of significance, we would accept the null hypothesis, H_0 and therefore conclude that corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on mandatory disclosure index of building material companies in Nigeria.

Hausman fest for Hypothesis three
Table 5
Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.434220	4	0.8382

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOGFSIZE	0.026572	0.019660	0.001565	0.8613
LOGFAGE	-0.087899	0.003817	0.011399	0.3903
LEVERAGE	-0.000317	-0.000245	0.000000	0.4819
ROE	-0.012503	-0.010510	0.000189	0.8848

The Hausman test is used to differentiate between the fixed effects model and the random effects model in panel data. In this case, the random effect is preferred under the null hypothesis due to higher efficiency, while under the alternative, fixed effects are at least as consistent and thus preferred.
In this case, random effect panel data is preferable. This is so because the null hypothesis was accepted (a p-value of 0.8382 is greater than 0.05).

Data analysis for hypothesis three
Table 6
Dependent Variable: VDI
Method: Panel EGLS (Cross-section random effects)
Date: 08/14/21 Time: 11:37
Sample: 2013 2019
Periods included: 7
Cross-sections included: 12
Total panel (unbalanced) observations: 83
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.502533	0.140780	3.569631	0.0006
LOGFSIZE	0.019660	0.018750	1.048520	0.2976
LOGFAGE	0.003817	0.052800	0.072292	0.9426
LEVERAGE	-0.000245	0.000147	-1.670345	0.0989
ROE	-0.010510	0.010852	-0.968490	0.3358

Effects Specification		
	SD.	Rho
Cross-section random	0.060151	0.3044
Idiosyncratic random	0.090932	0.6956

Weighted Statistics			
R-squared	0.071393	Mean dependent var	0.311025
Adjusted R-squared	0.023772	SD dependent var	0.090307
SE of regression	0.089417	Sum squared resid	0.623647
F-statistic	1.499192	Durbin-Watson stat	1.506917
Prob(F-statistic)	0.210590		

Unweighted Statistics

R-squared	0.132702	Mean dependent var	0.624458
Sum squared resid	0.816345	Durbin-Watson stat	1.151211

The panel data results show the effect of corporate attributes on voluntary disclosure of building material firms in Nigeria. The coefficient of determination R-square of 0.0714 implied that 7.4% of the sample variation in the dependent variable voluntary disclosure index (VDI) is explained or caused by the explanatory variables corporate attributes (FSIZE, FAGE, LEVERAGE and ROE) while 92.6% is unexplained. This remaining 92.6% could be caused by other factors or variables not built into the model. The value of R-square is an indication of the positive but very low relationship between the dependent variable (VDI) and independent variables (FSIZE, FAGE, LEVERAGE and ROE). The F-statistic was also used to test the overall significance of the model. The F-value of 1.499192 with a p-value of 0.210590 is an indication that the model is not statistically significant at a 5 per cent level of significance. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 1.506917 falls outside the conclusive region of the Durbin-Watson partition curve. Hence, there is no sign of autocorrelation.

Hypothesis three

$H0_3$: Corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on the voluntary disclosure index of building material companies in Nigeria.

To test the hypothesis:

The F-statistic of 1.499192 with a p-value of 0.210590 is a level of significance. Since the probability of the F statistics is greater than a 5% level of significance, we would accept the null hypothesis, H_0 and therefore conclude that corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on voluntary disclosure index of building material companies in Nigeria.

Discussion on Results

The result of hypothesis one revealed that corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on the overall disclosure index of building material companies in Nigeria. The decision is based on the fact that the P-value is greater than 0.05. The findings are contrary to the findings of Karim (2019), who investigated the influence of corporate attributes on disclosure by oil companies in Nigeria. The study finds that corporate attributes significantly affect the accounting disclosure by oil companies in Nigeria. Karim's (2019) findings showed that financial leverage has a significant positive effect on accounting disclosure by companies in Nigeria. Second, profitability has a significant positive effect on accounting disclosure by companies in Nigeria. Third, the study also found that firm size has a significant positive effect on accounting disclosure. Also, the findings of Aljifri *et al.* (2019) provided empirical evidence of the impact of firm-specific characteristics on corporate financial disclosures amongst UAE companies. The results of this study show that listing status, industry type, and size of firm are found to be significantly associated with the level of disclosure.

The result of hypothesis two revealed that corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on the mandatory disclosure index of building material companies in Nigeria. The decision is based on the fact that the P-value is greater than 0.05. The findings are contrary to the findings of Nor *et al.* (2020), who examined the impact of firm characteristics on mandatory corporate disclosures. The results prove that managerial ownership, foreign ownership, profitability and industry type affect the level of mandatory corporate disclosure.

Results in hypothesis three revealed that corporate attributes (firm size, profitability, leverage, firm age) have no significant effect on the voluntary disclosure index of building material companies in Nigeria. The findings are consistent with the findings of Sanni *et al.* (2020), who assessed the effect of corporate characteristics on voluntary disclosure of listed financial service firms in Nigeria for the period of 2014-2018. The study found that profitability and leverage have a negative and significant effect on the voluntary disclosure of financial service firms in Nigeria. However, a positive and significant relationship exists between firm size and voluntary disclosure. On the contrary, the findings of Uyar and Kilic (2020), investigated the influence of firm characteristics on voluntary disclosure of financial ratios in the annual reports of Turkish-listed companies using a sample of industrial firms listed in the Istanbul Stock Exchange (ISE). The results of multivariate analyses indicate that firm size, auditor size, profitability, and ownership diffusion have significant positive associations with voluntary disclosure levels of financial ratios, while leverage does not.

CONCLUSION AND RECOMMENDATIONS

The study was conducted on the effect of corporate attributes on the financial disclosure of building material companies in Nigeria. The study was carried out using secondary data. Firm size, firm age, profitability and leverage were used to measure corporate attributes, while overall disclosure, mandatory

disclosure and voluntary disclosure were used to measure corporate disclosure. It was deduced from the empirical studies that the majority of work used only mandatory disclosure and voluntary disclosure as measures for corporate disclosure without considering overall disclosure. The complete variables are used in this study. Data were collected from the selected listed building material firms in Nigeria. Data collected were analyzed using panel data-based multiple regression analysis after testing some pre-estimation tests. The result of the analysis revealed that corporate attributes have a positive but insignificant effect on corporate disclosure. Based on the findings of the study, we recommend that the Financial Reporting Council of Nigeria(FRCN), the Securities Exchange Commission(SEC), the Nigerian Stock Exchange(NSE), and other regulatory agencies shall take appropriate actions to guarantee comprehensive disclosure in accordance with relevant international accounting disclosure rules. An improvement in the quality of information disclosure will enable consumers to make informed predictions and evaluate the company's progress, which will invariably support stock market growth.
Also, effective enforcement programs should be implemented to ensure compliance with statutory accounting standards.

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Finally, smaller construction material companies should be encouraged by the government, which should promote IT growth in Nigeria. Every business should be able to afford cutting-edge technology. This will lower the cost of information and encourage the sharing of sufficient financial data.

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INCREASING FINANCIAL RESILIENCE FOR SUSTAINABLE ENTREPRENEURSHIP DEVELOPMENT IN THE FACE OF FISCAL DEFICIT AND DEBT SUSTAINABILITY CRISES IN NIGERIA

[1]Odili, Okwuchukwu, [1]Ezeudu, Ikenna J. and [2]Ekemezie, Ifeanyichukwu L.
[1]MichaelOkpara University of Agriculture, Umudike, Nigeria.
[2]Agip Oil Nigeria, Port Harcourt, Rivers State, Nigeria.
Corresponding author: palmereck@gmail.com, odili.okwuchukwu@mouau.edu.ng

ABSTRACT
This study adopted an integrative review research method. It examined fiscal deficit, debt sustainability, and sustainable entrepreneurship development to enhance entrepreneurs' financial resilience in Nigeria, using a data set from 1999 to 2022.Debt/GDP ratio, debt/export ratio, debt service/export ratio, and debt service/budget revenue ratio were used to assess debt sustainability. The study found that government revenue declined over the years while its fiscal spending rose. It further revealed that as of the end of the 2022 fiscal year, the debt/GDP ratio, debt/export ratio, debt service/export ratio, and debt service/budget revenue ratio were 38%, 73.9%, 9.02%, and 112%, against the recommended thresholds of 40%, 150%, 20%, and 30% respectively. Based on the thresholds of debt/GDP, debt/export, and debt service/export ratios, Nigeria's debt is sustainable but cannot engender sustainable entrepreneurship development. This study recommends that the Nigerian government diversify the economy, strengthen tax administration to encourage voluntary compliance, and increase the tax net to expand Nigeria's fiscal space and improve revenue generation. The government should give tax incentives to agriculture, business start-ups, and domestic infant industries to encourage entrepreneurship. In addition, the cost of governance should be reduced, and the public should be enlightened on the sustainability of Nigeria's debt to change the perception of Nigeria as a debt-risk country. Governments should digitalize their services to micro, small, and medium-sized enterprises and entrepreneurs. Digital services, including financial services (fintech), offer potential solutions to barriers to entrepreneurship and can help micro, small, and medium-sized enterprises build resilience to adverse shocks. The government should embark on entrepreneurship promotion policies aimed at skills training on digital and financial literacy, mentoring, networking opportunities, supplier linkage programs, and initiatives in special economic zones or innovation hubs, including social entrepreneurship and activity in the circular, green, and blue economy, which will increase businesses' resilience.
Keywords: Debt sustainability, financial resilience, fiscal deficit, ratio analysis, sustainable entrepreneurship development

INTRODUCTION
Micro, small, and medium-sized enterprises and self-employed workers are the backbone of economies. Globally, they represent about 90 percent of businesses and account for over two-thirds of employment (ILO, 2022). Over the past four years, the global operating environment for entrepreneurs and micro, small, and medium-sized enterprises has been rocked by shocks and crises, especially the COVID-19 pandemic. It strongly affected global food and energy prices and availability and increased inflation and financial distress in developing countries. Small business operators and the self-employed are disproportionately affected by business uncertainty arising from the crisis. Given the composition of consumption baskets, poor households are more vulnerable to rising inflation than wealthier ones (World Bank, 2022). Nigeria, and most other developing countries, cannot fund their developmental needs through revenue generated internally. With the help of government borrowing, additional financial resources are obtained, which can be used to implement public investment programs and finance other national needs that cannot be funded by internal revenue. Public debt is considered an existing source of funds for budget deficits by providing long-term material resources for large investment projects nationally and creating a certain standard in the domestic financial market (Owusu-Nantwi& Erickson, 2016).

In recent times, especially since 2017, Nigerians have been very concerned about the sustainability of growing public debt. Deb and fiscal sustainability measures were unsustainable before Nigeria exited the Paris Club and other multilateral creditors. This necessitated the sought for debt relief in 2005 by the Nigerian government.Odili (2022) discovered that the trend of public debt in Nigeria before the exit from the Paris Club had continued, especially since 2014, while improvements in government revenue and capital expenditure were negligible. In 2014, the global crude oil price fell, and Nigerian government revenue depleted, leading to borrowing from domestic and external markets to finance expenditure items (Omotosho*et al.,* 2016). Domestic and external debts are associated with interest payments, which keep rising, and government borrowings also increase to match fiscal responsibilities (Otonne&Oyenuga, 2019).

According to Ajaiyesimi (2021), the Nigerian government's provision to spend ₦14.6 trillion in debt repayment in three years under the Medium-Term Expenditure Framework and Fiscal Strategy Paper 2022-2024, which was at the time surging debt servicing obligations swallowed 97% of oil revenue, and it was worrisome.

Nigeria's public debt profile as of December 2020 was US$86 billion;about38%ofNigeria'stotaldebts are externaldebt (Ighodalo, 2021). Nigeria's total debt as of December 2021 was about $ 87 billion. This is about 21.13% of GDP. While in 2022 and as of June 2023, Nigeria's total debt stock was ₦46,250,367.94trn and ₦87.38trn, respectively (DMO, 2022). Debt risk is not only about how much a country has borrowed but also its ability to service its debt. Economists use two indicators to determine a country's debt sustainability: the debt/GDP ratio and the debt service ratio. The debt/GDP ratio is the total debt as a percentage of a country's gross domestic product (GDP). The International Monetary Fund puts the total debt/GDP ratio at 50%, while economists believe that the debt/GDP ratio becomes unsustainable when it exceeds 90%. On the other hand, the debt service ratio measures the proportion of export incomes used to service debt, including principal and interest payments. A healthy debt service ratio is below 15%.

Nigeria relies on revenues from petroleum to fund its national development projects and other infrastructure, but oil revenue alone can no longer sustain the economy amidst dwindling crude oil prices. Debt repayments are supposed to be made from revenue generation. At less than 5%, Nigeria has one of Africa's lowest revenue/GDP ratios. The average revenue/GDP ratio for sub-Saharan African countries is about 20%, and 30% for oil exporters (DMO, 2022). Amidst uncertainties in the global oil market, low revenue growth, and the negative effect of COVID-19 on the economy, Nigeria would face challenges generating enough revenue to service its debt. In 2022, Nigeria spent N5.24 trillion on debt service out of its N12.87 trillion total spending for the same period (DMO, 2022). The continuous deterioration in the country's macroeconomic aggregates in the past five years is worrisome. Nigeria's economic growth rate fell from 11.9% in 2015 to 2.2% in 2019 and became negative (-1.8%) in 2020 following the COVID-19 pandemic (DMO, 2022).

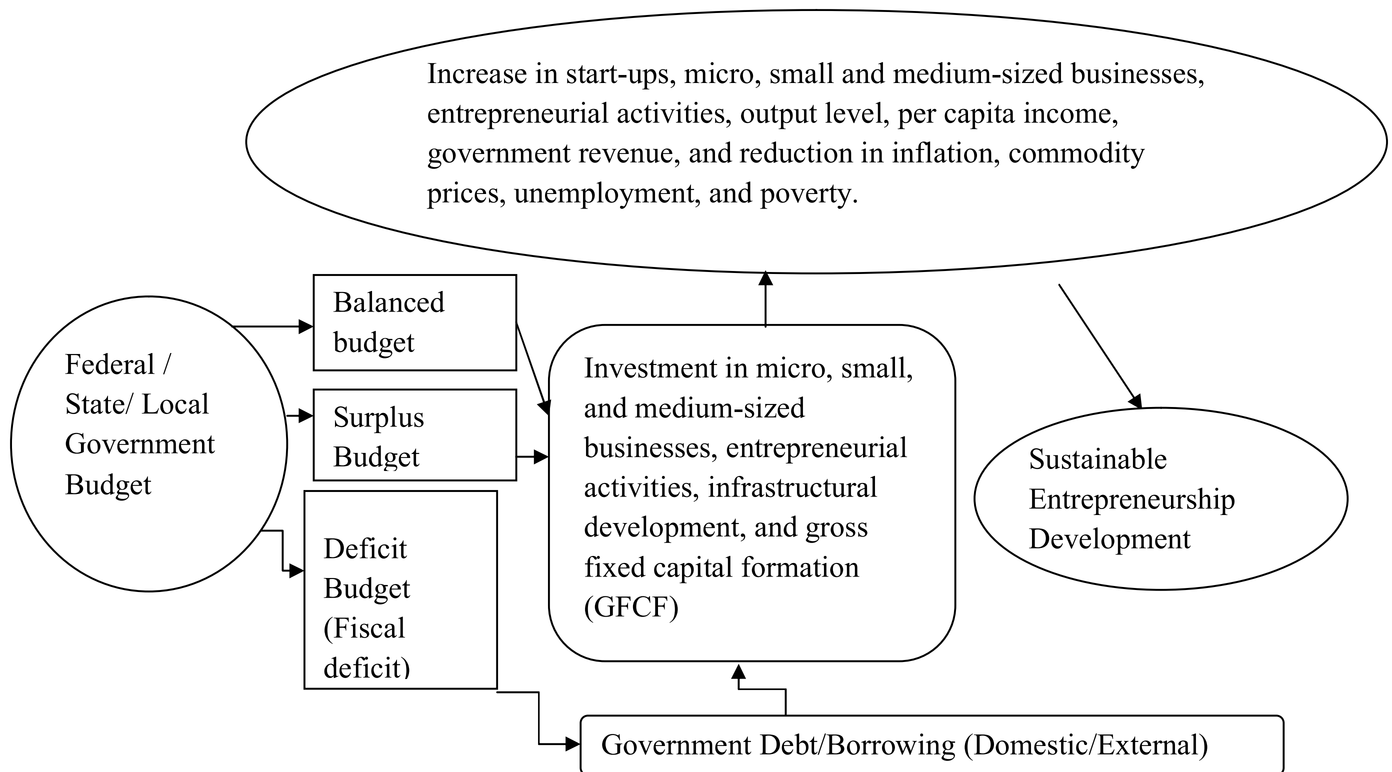
Similarly, the inflation rate spiked from 9% to 13%, while the unemployment rate skyrocketed from 9% in 2015 to 22.6% in 2018. Depreciation of the naira also followed soot by a whopping 57% between 2015 and 2019. Foreign direct investment declined in response to the deteriorating macroeconomic performance, from 6% of GDP in 1990 to 0.5% in 2019(DMO, 2022). These scenarios, coupled with other challenges such as high levels of insecurity, interest rates, poor infrastructure, bad governance, corruption, and acute shortage of foreign exchange, created a risk factor and the expectation that foreign investors in Nigeria may relocate to less risky countries. This implies that Nigeria will lose revenues that could have been used to service debt, thus constricting Nigeria's fiscal space and making funds unavailable for investment in critical sectors of the economy, especially small-sized businesses that have the potential to foster sustainable entrepreneurship development.

An empirical study on fiscal deficit and debt sustainability in Nigeria recorded different results by researchers (Aladejani *et al.,* 2021). While most of these studies argued that fiscal deficit and debt sustainability in Nigeria are not sustainable (Ezeabasili *et al.,* 2011;Boboye&Ojo, 2012; Ajaiyesimi, 2021), some other studies believe that they are sustainable (Sulaiman&Azeez, 2012; Otonne&Oyenuga, 2019; Ighodalo2021). Games (2021) also recorded that Nigeria's public debt burden and sustainability and results from empirical studies reviewed were ambiguous and varied. None of the earlier studies examined fiscal deficit and debt sustainability about sustainable entrepreneurship development in Nigeria. This study, therefore, fills these gaps in the literature by providing a dynamic interaction between fiscal deficit and debt sustainability and re-conceptualizing and expanding the theoretical understanding of sustainable entrepreneurship development in Nigeria.

LITERATURE REVIEW

A fiscal deficit is a gap in the government's budget between expenditure items and revenue items. Various governments usually finance deficits through borrowing. Debts in this study are financial assets owed to private citizens, institutions, foreign governments, and federal or state governments, otherwise known as creditors. A debt instrument is a financial claim that requires payment of interest and principal at a future date. A country's public debt is sustainable if the government can meet all its current and future responsibilities without defaulting. Federal government debt increases when there are net budget deficits and increases in intra-governmental borrowing. Economists and experts do raise concern when the level of borrowing by the government appears to be 'too high.' While it is difficult to say precisely what level of government borrowing is 'too high,' debt levels depend on the context and the purpose of such government borrowing; however, high levels of government borrowing over the years do increase the total debt stock of the government and may be perceived as 'unsustainable (Otonne&Oyenuga, 2019).

Conceptually, this study is anchored on the assumption that access to finance by entrepreneurs will increase entrepreneurs' operational scale, multiply total productivity, increase household income, increase government revenue, reduce commodity prices and poverty, and contribute to sustainable entrepreneurship development in Nigeria. Information distortion, transaction cost, and risk of financing options determine micro, small, and medium-size enterprises' ease of access to finance (Aabi, 2014). While bank loans offer moderate returns and may be adequate for micro, small, and medium-sized enterprises, alternative financial innovations improve conventional risk-sharing mechanisms (Odili*et al.,* 2022; OECD, 2018). To raise funds, small and medium-scale business owners would formulate strategies to address the environmental factors affecting the business and establish relationships with funding institutions. Figure 1 presents the conceptual framework for this study.



Source: Conceptualized by the authors 2023

Theoretical Constructs

In this study, three theories, the Keynesian theory of increasing economic activity, the debt overhangs theory, and the theory of financial intermediation formed the basis for the integrative review approach.

Keynesian Theory of Increasing Economic Activity: According to Keynes (1936), the economy's growth and stability depend on the federal government's intervention. The Keynesian economists believe that private sector decisions may lead to inefficiency in the macro-economy of a nation. Keynes, therefore, suggested that the government's monetary and fiscal policy actions are necessary to direct the economy on the right path to growth. These policy actions will ensure stability in productivity and business cycles, accelerate economic activities, generate employment opportunities, increase output, and foster sustainable growth and development (Odili, 2022). Keynes believes that during periods of low output, two approachesthatcan pull an economy out of recession are reducing interest rates and increasing government expenditure on infrastructure. This implies a reduction of monetary policy rate to commercial banks by the CBN and the commercial banks to reduce their lending rate to their customers.

Debt Overhang Theory

The theory of debt overhang holds that the stock of public debt and its cost of servicing affect the growth of an economy by discouraging private investment or altering efficient public spending. Mohanty and Mishra (2016) stress that the debt overhang theory expresses the increased cost of servicing debt, which impedes investment if the country's ability to repay debt is exceeded by its anticipated external debt. Krugman(1988) argues that potential investors would be more concerned about the heavily taxed

production by creditors in an attempt to service public debt at the expense of the investment costs incurred from future output. The implication of this is that the possibility of the government sacrificing fiscal consolidation results from the ripple effect of pressure caused by public debt will further increase the country's budget deficit. The theory further elaborates on the impact of capital accumulation or productive growth during which public debt is considered to have a non-linear outcome on growth. According to this hypothesis, a continuous increase in debt servicing costs in a country will further discourage domestic and foreign investments that would have accelerated economic growth.

The Theory of Financial Intermediation: Twostructuralgeneralequilibrium models of growth theories that make strong predictions on how financial intermediation can affect entrepreneurs with limited access to credit. The first model, credited to Lloyd-Ellis and Bernhardt (2000), is a growth model with occupational choice, investment, and credit constraints. Gine and Townsend (2003) gave strong predictions from the exogenous introduction of a credit market into the model: intermediated business units have higher asset growth rates and entrepreneurship/occupational mobility levels. The second model isthe endogenous financial intermediation model credited to Greenwood and Jovanovic (1990), centered on project investment and growth, as Townsend and Ueda (2003) generalized. The model predicts higher (though time-varying) asset growth rates and improved risk sharing for intermediated businesses. The two models jointly predict financial intermediation to positively affect small business's assets, risk sharing, entrepreneurship, and credit access.

Empirical Literature

Some empirical studies have been carried out on fiscal deficit, public debt, economic growth, and development in developed and developing economies and recorded different results. These studies did not explore the dynamic interaction between fiscal deficit, debt sustainability, and entrepreneurship development. A few of the studies that relate to this study are here reviewed.

In Nigeria, Odili (2022) examined Nigeria's debt status and its effect on macroeconomic performance from 1981 to 2018. The autoregressive-distributed Lag (ARDL)--bounds testing model was adopted to estimate the data sourced from the CBN statistical bulletin and the Debt Management Office. The short-run results indicated the inverse relationship between public debt servicing and RGDP, while the long-run result revealed an insignificant effect on RGDP. Domestic debt had a positive and significant effect on RGDP. External debt was found to have a negative and significant impact on RGDP. It was recommended that government expansionary fiscal policies focus on capital expenditure funding. It further suggested that massive investment is needed in Nigeria's Nigeria's agriculture, manufacturing, trade, logistics, and tourism sectors.

Kelvin (2022) assessed the determinants of entrepreneurial growth in Nigeria using a cross-sectional survey design. Questionnaires were administered to five hundred and forty-five (545) respondents in six (6) geo-political regions of Nigeria. The analytical framework was based on the factor and principal component analyses. The approximation chi-square result supports the correlation matrix's factorability and the dataset's suitability for factor analysis. The principal component analyzed showed that capital financing is the most significant factor driving the growth of entrepreneurial activities in Nigeria. It was recommended that the Nigerian government and other established agencies on entrepreneurship should assist in promoting entrepreneurial activities by providing the required funding for the growth of entrepreneurs.

In Bangladesh, Mehta *et al.* (2022) assessed the impact of capital and knowledge on women's entrepreneurial development using the lenses of transformational leadership practices. The study was based on 580 SMEs, and a structured questionnaire was administered. Coefficients of the variables showed that access to finance positively and significantly impacted women's entrepreneurial development. At the same time, knowledge level had a positive effect and was interlinked with women's entrepreneurial development. Transformation leadership practices were positively linked to the development of women entrepreneurs.

Odili *et al.* (2022) focused on financing entrepreneurial development in a developing economy by examining its implication on nation-building and poverty reduction in Nigeria from 1990 to 2021. Four real sectors of the Nigerian economy –Agriculture, Trade, Information and Communication, and Manufacturing- were investigated. The Autoregressive Distributed Lagged model was applied in estimating the variables. The study found that financing entrepreneurs engaged in agriculture had an insignificant negative effect on GDP growth but a significant positive effect on poverty reduction. Financing of entrepreneurs engaged in trade, information, and telecommunication businesses positively and significantly affected GDPgr and PORr. Meanwhile, financing entrepreneurs engaged in manufacturing had positive and insignificant effects on GDPgr and PORr. The study recommended that microdata and micro-level analysis, registration, and documentation of business start-ups' by the government should be carried out to ensure the availability of information that will improve the government's understanding of the different needs of small business entrepreneurs.

Similarly, Oluyemi*et al.* (2021) examined the determinants of financing instruments used by entrepreneurs in formal and informal settings. Their study tried to determine if credit record, gender, income, awareness, asset base, and affiliation influence entrepreneurs' decisions on financing options in formal and informal settings. The study administered a questionnaire to 300 selected micro-entrepreneurs at the University of Lagos, Nigeria, based on a purposive sampling method. The study established that credit records and assets-based finance options significantly direct formal financing. Sex and affiliations significantly determined informal financing options, while awareness was a significant determinant of both formal and informal financing options by young entrepreneurs.

Similarly, Ikue *et al*. (2021) examined the sustainability of public debt and the causal relationship between fiscal and trade deficits in Nigeria from 1960-2019. Co-integration and Granger causality were employed to test the sustainability of budget and tradedeficits. The results from the analysis show that Nigeria's public debt policies are not sustainable. This implies that the revenue generated was below expectation, which made the federal government depend on internal and external debt to meet expenditure needs.

Ayomitunde*et al.* (2019) examined the relationship between entrepreneurship financing from the perspective of agricultural small and medium-scale enterprises and nation-building in Nigeria from 1990 to 2017 and found that agriculture and forestry business financing and gross domestic product growth rate have an insignificant negative relationship. There is a negative relationship between mining and quarrying business financing and GDP growth rate, but the relationship was significant at a 10 percent significance level. Meanwhile, broad money supply and GDP growth rate have a significant positive relationship.

In 13 Caribbean countries, Wright and Grenade (2014) investigated a non-linear relationship between debt and growth using a panel OLS and threshold dynamics model. They found a debt/GDP ratio of 61% for the sampled countries, with a debt/GDP ratio higher than the 61% threshold having an adverse impact on investment and growth. The results revealed a marked divergence between actual debt/GDP ratios and the calibrated optimal ratios at the country levels. The study explained that the negative debt-growth relationship suggests that government borrowing must be consistent with countries' debt sustainability standards and should be able to yield growth dividends over time.

Reinhart and Rogoff (2010) appraised the inter-relationship among high public debt levels, economic growth, and inflation in 44 countries utilizing time series data. They found that a high debt/GDP ratio of 90% and above was associated with lower economic growth in both advanced and emerging market economies. They did not record any link between debt and growth for 20 advanced countries until public debt hit a threshold of 90%. In their observations with debt/GDP ratio, over 90% have median growth of 0.1% lower than the low debt burden groups whose mean levels of growth were 4%. The study, however, discovered that lower levels of external debt/GDP (60%) were associated with negative results in the case of emerging market economies.

Gap in Empirical Literature

Empirical literature (Odili (2022); Ikue *et al*. (2021); Aladejana *et al.* (2021); Wright and Grenade, (2014); Reinhart and Rogoff, (2010) exist on fiscal deficit, public debt, economic growth, and development. At the same time, Mehta et al. (2022), Odili *et al.* (2022), Kelvin (2022), Oluyemi *et al.* (2021), and Ayomitunde *et al.* (2019) researched entrepreneurship development. These studies did not explore the dynamic relationship between fiscal deficit and debt sustainability and how they interact to foster entrepreneurs' financial resilience for sustainable entrepreneurship development, which is the focus of this current study. Secondly, this study adopted an integrative review research method and re-conceptualized and expanded the theoretical understanding of sustainable entrepreneurship development in Nigeria. This approach differs from that of other researchers, as recorded in the literature reviews.

METHODOLOGY

While fiscal deficit, debt sustainability, and entrepreneurship development are conceptual issues, and quantifying them using econometric methodology is complex. Some ratios, debt/GDP, debt/export, debt service/GDP, debt service/export, reserves/import, and reserves/debt stock, are used to measure debt sustainability. In this study, an integrative review research method in which a critical examination of past empirical and theoretical literature is carried out and the outcome summarized to provide a more comprehensive and better understanding of a particular issue or phenomenon (Broome, 1993) was explored in analyzing fiscal deficit and entrepreneurship development, while total debt/GDP ratio, total debt/export ratio, debt service/export ratio, and debt service/revenue ratio were used to explain debt sustainability. The outcomes were employed to re-conceptualize and expand the theoretical understanding of how fiscal deficit and debt sustainability influence sustainable entrepreneurship development in Nigeria.

The total debt/GDP ratio is a measure that compares a country's public debt to its gross domestic product. It indicates the country's ability to pay back its debt. The higher the debt/GDP ratio, the higher the chances of public debt default. A country with problems paying off its debts indicates a high debt/GDP ratio.

The total debt/export ratio is the total outstanding debt at the end of the year to the economy's exports of goods and services for any year.

Debt service/export is the ratio of debt service payments (principal + interest) to export income. The debt service/export ratio measures the proportion of a country's total export revenue committed to servicing public debt incurred in the past period. Debt service/export measures liquidity. The ability of a debtor country to service its debt declines as the ratio increases, and for most countries, especially developing countries, the ratio is between 0 and 20%**.**

The debt service/revenue ratio measures how much of a country's total revenue is used to pay interest and principal on debt. It indicates a country's financial sustainability, solvency level, and ability to invest in public services and infrastructural development.

Table 1 presents debt indicators and thresholds for Nigeria.

Table 1: Debt Indicators and Thresholds

Medium-Term Indicator 'Solvency'	**Sustainability Threshold (%)**	**Short-Term Indicators (Liquidity)**	**Sustainability Threshold (%)**
Debt/GDP ratio	40	Debt Service/Export ratio	20
Debt/Exports ratio	150	Debt Service/Revenueratio	30
Debt/Revenue ratio	250		

Source: Debt Management Office, 2014

ANALYSES AND DISCUSSION ON FISCAL DEFICIT, DEBT SUSTAINABILITY, AND SUSTAINABLE ENTREPRENEURSHIP DEVELOPMENT

Fiscal Deficit, Debt Status, and Sustainable Entrepreneurship Development in Nigeria

In developing countries, fiscal deficits are mainly driven by massive capital requirements to finance the critical infrastructure necessary to drive and position the country for growth and development (Ighodalo, 2021). Government expenditure in Nigeria is made possible by revenues from crude oil booms, which alternate with periods of oil glut that significantly decline government revenues. Fiscal deficits in Nigeria are skewed heavily towards recurrent expenditure, which does not necessarily drive development. In 1999, government recurrent expenditure was N449.66 billion, which increased to N984.30 billion in 2003 (Odili, 2022). In 2004, it rose higher to N1.11 trillion, and the trend continued with a whopping N2.12 trillion in 2008, N2.13 trillion in 2009, N3.33 trillion in 2012, andN4.18 trillion in 2016 (Odili, 2022). Statistically, in 2018, recurrent expenditure was ₦3.5 trillion; in 2019, it increased to ₦4.7 trillion, rose again in 2020 to ₦4.8 trillion, in 2021 to ₦5.9 trillion, and in 2022 to ₦6.9 trillion (DMO, 2022). This analysis created the impression that recurrent expenditure in Nigeria contributes significantly to the fiscal deficit. Table 2 presents Nigeria's fiscal deficit, fiscal deficit growth rate, and deficit (% GDP) from 1999-2022.

Table2. Nigeria's Fiscal deficit, Fiscal deficit growth rate, and Deficit (% GDP)from 1999-2022

Year	Fiscal Deficit ($M)	Growth Rate of Deficit (%)	FiscalDeficit (% GDP)
1999	-1,126	-89.06	-1.96
2000	2,757	144.85	4.07
2001	-2,356	-14.55	-3.22
2002	1,262	46.43	1.34
2003	-2,260	-79.08	-2.20
2004	7,154	216.55	5.49
2005	8,326	16.38	4.91
2006	19,514	134.37	8.76
2007	-2,927	-85.00	-1.12
2008	18,815	542.81	5.70
2009	-15,842	-15.80	-5.33
2010	-15,395	2.82	-4.17
2011	1,789	88.38	-0.43
2012	593	-66.85	-0.13
2013	-13,709	-2211.80	-2.66
2014	-13,808	-0.72	-2.43
2015	-18,706	-35.47	-3.80
2016	-18,791	-0.45	-4.64
2017	-20,346	-8.28	-5.42
2018	-18,198	-10.56	-4.32
2019	-21,019	-15.50	-4.69
2020	-23,962	-14.00	-5.58
2021	-26,613	-11.06	-6.03
2022	-26,165	-1.68	-5.48

Source: Authors' computation (2023) based on DMO, NBS, and World Bank data - 2022

The growth rate of fiscal deficits in Nigeria between 1999 and 2022, as shown in Table 2, reveals that fiscal deficits have been rising and falling, ranging between the highest level of -2211.80 in 2013 and 542.81 percentage points in 2008, though primarily negative, showing that finance gap between revenue and expenditure has been on the increase, especially since 2013. This has severe negative consequences on sustainable entrepreneurship development in Nigeria. Similarly, fiscal deficit as a percentage of GDP has been consistently negative, especially since 2009. Figure 2 shows that annual fiscal deficits have remained below 6% of GDP since 2015, implying that public expenditure is increasing while revenue collection is low, creating a huge revenue-expenditure gap. The debt stock has grown by 30% per year between 2015 and 2020compared with 23% per year between 2010 and 2015 (DMO, 2022).

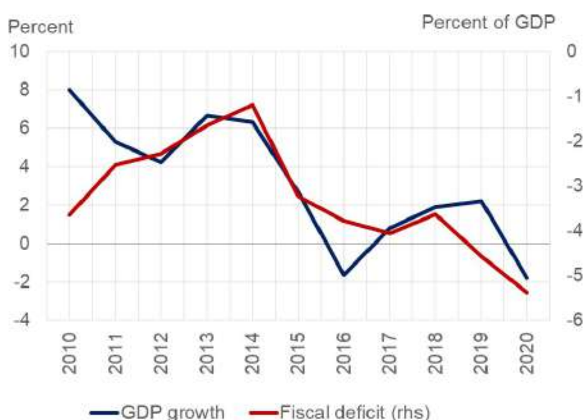


Figure 2:GDP growth and fiscal deficit
Sources: DMO (2022), *www.dmo.gov.ng*, and World Bank, 2022

Nigeria's Public Debt Portfolio

Infrastructural investment is a major gross fixed capital formation source for sustained growth. However, borrowing becomes imperative in the presence of fiscal deficit and scarce domestic financial resources for the required infrastructural development investment. In the early nineteenth century, under colonial rule, Nigeria obtained her first public debt to finance infrastructural development(Odili, 2022). The loan amount was £5.7 million with a repayment period of 20 years and an interest rate of 2.5% per annum. The British government borrowed it on behalf of the Nigerian government in about 1923 – 1924. Since then, Nigeria's loan portfolio and debt servicing continued to increase. Nigeria's public debt portfolio from 2014 to 2022 is presented in Table 3, while the outstanding external and domestic debts as of December 31, 2022, are presented in Table 4.

Table 3: Nigeria's Public Debt Portfolio (2014-2021)

Year	Domestic Debt(₦'trn)	External Debt(₦'trn)	Total Debt(₦'trn)
2014	9,535,549.07	1,631,523.60	11,167,072.67
2015	10,948,526.57	2,111,530,71	13,060,057.28
2016	14,537,119.70	3,478,915.40	18,016,035.10
2017	18,376,998.77	5,787,512,64	24,164,511.41
2018	16,627,841.75	7,759,229.99	24,387,071.74
2019	17,943,940.63	8,271,040.50	26,214,981.13
2020	20,209,896.37	12,705,618.48	32,915,514.85
2021	23,700,801.25	15,855,231.25	39,556,032.50
2022	27,548,116.06	18,702,251.88	46,250,367.94

Source: Debt Management Office, www.dmo.gov.ng

Table 4: Nigeria's Total Public Debt Portfolio as of December 31, 2022

Debt Category	Amount Outstanding (US$' M)	Outstanding (N'trn)	% of Total
Total External Debt	**41,694.91**	**18,702,251.88**	**40.44%**
FGN Only	**37,238.54**	**16,703,347.12**	**36.12%**
States & FCT	**4,456.37**	**1,998,904.76**	**4.32%**
Total Domestic Debt	**61,415.93**	**27,548,116.06**	**59.56%**
FGN Only	49,515.92	22,210,364.60	**48.02%**
States & FCT	11,900.01	5,337,751.46	**11.54%**
Total Public Debt(A+B)	**103,110.84**	**46,250,367.94**	**100%**

Source: DMO, 2022

Tables 3 and 4 show that public debt in Nigeria increased from ₦11,167,072.67trn in 2014 to ₦24,164,511.41trn, ₦32,915,514.85trn, ₦24,387,071.74trn, and ₦46,250,367.94trn, in 2017, 2018, 2020 and 2022 respectively. The borrowed fund has charges because it has to be serviced and interest charges paid. The cost implications of servicing the public debt increase as the debt increases. Due to the crude oil market glut, revenue generation is dwindling and cannot provide the needed funds for infrastructural development. The wage bill of Nigeria is rising, and part of the funds the Federal Government borrowed is used to fund her expenditure obligations on overhead costs and debt servicing payments, which were higher than the revenue generated by the government within the same period. Breaking down the public debt portfolio into its components reveals certain vulnerabilities. Namely, short-term debt remains high, and debt servicing (see Figure 3) – which accounted for 86.2 percent of consolidated revenues in the 2020 – 2022 fiscal year, crowds out expenditure on the delivery of public services (DMO, 2022).

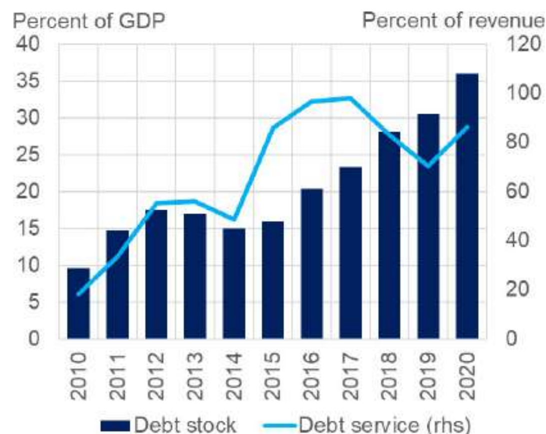


Figure 3: Debt and debt servicing
Sources: DMO (2022)*, www.dmo.gov.ng*, and World Bank, 2022

Debt Sustainability Indicators and Thresholds
In Nigeria, debt sustainability analysis is carried out in the medium-term scenarios. These scenarios are numerical assessments that examine features of economic variables and other indices to ascertain the conditions under which debt and other indicators would stabilize the shocks or risks in the economy and provide for policy amendments. In debt sustainability analysis, solvency and liquidity are two critical measures. Debt stock ratios are solvency indicators, while debt service ratios are liquidity indicators. The debt-stock ratios are the Debt/GDP ratio, Debt/Export ratio, and Debt/budgetratio. Meanwhile, the short-term liquidity requirements of the country are measured with debt service obligations (debt service/export and debt service/budget revenue).
The Debt Sustainability Framework (DSF) was developed by the Bretton Wood Institutions (BWIs)to assess a country's risk of debt distress based on some debt indicators and thresholds. The BWIs linked the debt sustainability thresholds to a country's policies and institutional quality. Countries with solid or good policies and institutions are more likely to absorb higher debt burdens and, therefore, are less likely to fall into debt distress than countries with weak or poor policies and institutions. The BWI framework formulated three thresholds for strong, medium, and weak policy and institutional performers. The DSF indicators and thresholds based on these classifications are presented in Table 5.

Table 5: DSF Debt Sustainability Indicators and Thresholds

DSF indicators and thresholds			
Indicators	**Assessment of institutional strength and quality of policies**		
	Poor	**Medium**	**Strong**
PV debt /GDP	30%	40%	50%
PV debt /exports	100%	150%	200%
Debt service/exports	15%	20%	25%
PV debt/revenue	200%	250%	300%
Debt service/revenue	25%	30%	35%

Source: IMF, 2002
As shown in Table 5, countries with strong policies and institutions will shoulder substantially higher debt burdens than poor performers. Thus, the thresholds that apply to strong performers are higher than those to weak performers, and the debt levels for strong performers are considered unsustainable for poor performers. Public debt is sustainable if the present values of its current and future primary expenditure items are less than the present value of its current and future stream of income. Five indicators are listed in the DSF; in practical terms, the BWIs focus mainly on those ratios with GDP and export denominators. This is because GDP and export data are more reliable than national revenue data and more accessible to compare across countries.

Table 6: Debt/GDP ratio, debt/export ratio, debt service/export ratio, and debt service/revenue ratio of Nigeria

Year	debt/GDP %	debt/export %	debt service/export %	debt service/revenue %
1999	40.23	174.5	7.61	3.2
2000	37.04	180	8.76	6.9
2001	37.84	161.4	12.72	7.0
2002	40.70	162.9	8.06	9.4
2003	36.46	146.8	5.93	14.1
2004	34.14	162.1	4.47	9.8
2005	17.89	78.8	15.41	7.1
2006	7.39	18.4	10.98	4.2
2007	7.86	26.2	1.44	3.7
2008	7.28	18.9	0.76	4.8
2009	9.58	35.1	1.28	5.3
2010	9.60	22.5	1.50	12.3
2011	10.35	16.4	0.51	15.6
2012	10.55	14.7	1.34	21.69
2013	10.62	26.1	0.49	24.6
2014	10.59	26.5	5.32	28.6
2015	16.80	61.7	3.21	33.0
2016	18.6	90.4	6.28	43.5
2017	21.3	88.5	6.75	45.5
2018	17.5	83.0	7.88	55.8
2019	29.1	89.3	7.10	52.3
2020	34.98	200.1	13.36	81.1
2021	37	144.4	16.19	97
2022	38	73.9	9.02	112

Source: Computed from the authors' (2023) based on data collected from CBN, NBS, and DMO - 2022

Table 6 shows that Nigeria's public debt remains sustainable despite the pressure orchestrated by rising fiscal deficits and stagnating growth. Standing at 38% of GDP in 2022, Nigeria's public debt is within the commonly recognized boundary of debt sustainability (50% of GDP), and Nigeria's self-imposed threshold of 40% (DMO, 2022), and it is expected not to go beyond this level in the medium-term framework. Nigeria recorded above the 40% threshold but not up to the 50% commonly recognized threshold in 1999 (40.23%) and 2002 (40.70%). The threshold for the debt/export ratio is 150%. The PV debt/exports in 2022 was 73.9%. This also implies that Nigeria's public debt remains sustainable. Nigeria has to exercise caution here because there are many occasions where the debt/export ratio exceeded 150% even though they were reasonably within the commonly recognized debt threshold(200% of exports). For instance, from 1999 to 2004, the debt/export ratio was above 150%. Similarly, in 2020, the debt/export ratio was 200.1. The debt service to export ratio proves Nigeria's public debt remains sustainable. The threshold for the debt service/exports ratio is 20%, and from Table 6, the highest value recorded was 16.19% in 2021.
In contrast to the results obtained based on debt/GDP ratio, debt/export ratio, and debt service/export ratio analysis, debt service/budget revenue shows that Nigeria's public debt is not sustainable. The debt service/budget revenue threshold is 30% or 35% upper limit threshold (table 5). From the records in Table 6, debt service/budget revenue from 2015 to 2022 exceeded the threshold of 30% with an average annual increase of about 46.1%. In 2020, 2021, and 2022, the debt service/revenue ratio was 81.1%, 92%, and 112%, respectively. These are unprecedented and unsustainable, so Nigeria faces challenges in generating enough revenue to service its debt. Nigeria relies on revenues from the sale of crude oil to finance her critical sectors such as micro, small, and medium-sized businesses, entrepreneurship activities, agriculture, healthcare, education, infrastructure, and social protection, but oil revenue alone no longer sustains the economy due to dwindling crude oil prices, and this is a problem to Nigeria's economic sustainability. There are several reasons Nigeria's debt service/revenue ratio is a problem for sustainable entrepreneurship development, and they include the following:

Poor fiscal space: The government spends most of its revenues on debt servicing, constricting the fiscal space for other public expenditure priorities such as small-sized businesses, agriculture, healthcare, education, infrastructure, and social protection. This restricts the government's ability to respond to shocks, crises, and emergencies and pursue long-term development plans.

High risk of debt crises and defaults: A high debt service/budget revenue ratio may make it challenging to meet its debt obligations and force it to resort to further borrowing, restructuring, and rescheduling. This can damage the government's reputation and credibility in global markets and reduce its ability to deliver economic services.

Stagnateeconomic growth and development: A high debt service/revenue ratio may require reducing public expenditure on productive sectors like micro, small, and medium-sized businesses, agriculture, manufacturing trade, and technology. This can make the economy less productive and competitive, reducing per capita income.

Promote inequality and poverty: A high debt service/budget revenue ratio may require high taxes and subsidy removal to raise revenue and undertake social transfers as palliatives. This can affect disposable income and household purchasing power, especially for start-ups, micro, small and medium-sized businesses, and vulnerable entrepreneurs.

Policy Options for Improving Fiscal Deficit, Debt Sustainability, and Entrepreneurship Development in Nigeria

The primary factor influencing macroeconomic performance in Nigeria is over-reliance on volatile oil export revenue, which accounts for more than 90 percent of total exports in Nigeria. This limited fiscal space for other public expenditure priorities and hindered the government from investing in micro, small, and medium-sized businesses, entrepreneurship development, and other infrastructural development. Similarly, restrictive trade policies, weak exchange rate management, monetization of the fiscal deficit by the Central Bank of Nigeria (CBN), and a spike in food prices are some of the macroeconomic factors influencing Nigeria's economy. Policy options for improving fiscal deficit scenarios and debt sustainability in Nigeria that have the potential to increase entrepreneurs' financial resilience and lead to sustainable entrepreneurship development paths require a multi-dimensional approach by the federal government based on six reciprocally strengthening policy actions and strategies.

Revenue mobilization: Nigeria needs to maintain a minimum level of revenue to deliver critical public services. Revenue mobilization can be achieved by increasing tax rates on pro-health excise rates (alcohol, tobacco, and sugary drinks), blocking the loopholes in the current tax legal framework, strengthening tax administration and management to encourage voluntary compliance, and providing tax incentives to agriculture, start-ups, and domestic infant industries. This will expand the productive base, increase national output, expand the tax net, and improve revenue generation.

Strengthening institutional arrangements and governance practices: The National Assembly (2007) in the Fiscal Responsibility Act, 2007, sets good practices, which include deficit ceilings and limits to financing from the CBN. The areas that may need review include the specification of predictable and transparent transfers of oil and gas revenues to the Federation Account, ceilings on budget allocation to general administrative expenditure, and sanctions for breaking the fiscal rules. Improving debt management could also help reduce fiscal costs. This can be done by having deficit borrowing plans based on costs and other fiscal information, improving cash management practices to eliminate the reliance on CBN borrowing, and adding CBN financing as part of the public debt stock.

Freeing-up fiscal space through adopting better allocation spending regime and adherence to expenditure ceiling: A commitment to adhere to the expenditure ceiling for general administrative expenditures, which is currently being allocated a high share of the total expenditure of the federal government, is imperative. Furthermore, strengthening the budget preparation process to ensure more realistic revenue projections and monitoring can result in better allocation decisions across all tiers of government to enhance the overall efficiency of government spending.

Formulating and implementing a coherent entrepreneurship policy framework: Support for entrepreneurship is transversal and concerns multiple ministries. Policies involve, among others, facilitating access to finance, providing entrepreneurship education, innovation, information and communications technologies, research and development, trade, and enabling market access.

Supporting digital and technology entrepreneurs: Digital transformation opens up new possibilities and catalyzesvalue creation and often disruptive innovation. The pandemic accelerated the process of digitalization within public administration and the private sector and opened up opportunities for digital entrepreneurs in e-commerce, financial technology (fin-tech), and health technology, to name a few. Green and blue entrepreneurs and small-sized enterprises are drivers of innovative,

environmentally sustainable solutions needed to achieve sustainable entrepreneurship development. The protection of intellectual property rights is essential for these businesses. In this regard, a software-based tool that allows any user to receive an automatically generated report concerning the intellectual property assets that the user is holding is imperative.

Integrating the most vulnerable entrepreneurs: Inequalities between and within countries, including the digital divide, have amplified and widened because of the pandemic, affecting progress on sustainable entrepreneurship development. The growth in the fin-tech sector over the past few years allowed the unbanked part of the population to obtain access to financial services. Social entrepreneurs seek to empower excluded individuals to participate in financial, social, and economic systems. From providing educational technology and e-health services for the most vulnerable to developing community-tracing initiatives, their work is more critical than ever. Inclusive businesses emphasize integration along the value chain to create economic opportunities for low-income populations.

CONCLUSION AND RECOMMENDATIONS

This study found that government revenue declined over the years while its fiscal spending rose. It further revealed that as of the end of the 2022 fiscal year, the debt/GDP ratio, debt/export ratio, debt service/export ratio, and debt service/budget revenue ratio were 38%, 73.9%, 9.02%, and 112%, against the recommended thresholds of 40%, 150%, 20%, and 30% respectively. Based on the thresholds of debt/GDP, debt/export, and debt service/export ratios, Nigeria's debt is sustainable but cannot foster sustainable entrepreneurship development. The debt service/budget revenue ratios of 81.1%, 92%, and 112% in 2020, 2021, and 2022, respectively, were too high. This constricts Nigeria's fiscal space and deprives the country of revenues needed to service debt, ensure infrastructural development, and foster sustainable entrepreneurship development. The ability to tackle the challenge of sustainable entrepreneurship development in Nigeria hinges on factors such as peace and security, political systems, and institutional arrangements. These factors could reduce the fiscal deficit and improve the net benefits of public debt that will foster sustainable entrepreneurship development in Nigeria.

This study recommends that the Nigerian government diversify the economy, strengthen tax administration to encourage voluntary compliance, increase the tax net to free and expand Nigeria's fiscal space, and improve revenue generation. The government should give tax incentives to agriculture, business start-ups, and domestic infant industries to encourage entrepreneurship. In addition, the cost of governance should be reduced, and the public should be enlightened on the sustainability of Nigeria's debt to change the perception of Nigeria as a debt-risk country. Governments should digitalize their service provision to micro, small, and medium-sized enterprises and entrepreneurs. Digital services offer potential solutions to barriers to entrepreneurship and can help micro, small, and medium-sized enterprises build resilience to adverse external shocks. Online platforms for administrative procedures help small firms start and run their business and make it easier to reach vulnerable entrepreneurs or those in remote areas. The government should embark on entrepreneurship promotion policies aimed at skills training on digital and financial literacy, mentoring, networking opportunities, and initiatives in special economic zones or innovation hubs, social entrepreneurship, and green and blue economies, which will increase entrepreneurs' financial resilience.

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SUB THEME
FINTECH REVOLUTION AND TECHNOLOGY FOR BUSINESS GROWTH AND DEVELOPMENT

FINANCIAL DERIVATIVE AND FINANCIAL PERFORMANCE OF LISTED COMMERCIAL BANKS IN NIGERIA

Uche-Udo, Ngozi Nnenna and Okafor, Michah C.
Michael Okpara University of Agriculture, Umudike, Abia State – Nigeria
Corresponding author: ngoziuche16@yahoo.com, michassociates@yahoo.com

ABSTRACT
This study examined Nigeria's Financial Derivatives and the Financial Performance of Listed Commercial Banks. A period of ten (10) years (2013 to 2022) was covered, and an ex-post facto research design was adopted and employed all fourteen (14) listed commercial banks. Earnings per Share (EPS) was used as a measure of performance. At the same time, Financial Derivative Assets (FDA), Financial Derivative Liabilities (FDL), Financial Derivative Trading Income (FDTI), and Financial Derivative Disclosure (FDD) were measures of financial derivatives. Results revealed that FDA, FDTI, and FDD have a positive significant effect (5%) on earnings per share. In contrast, FDL has an insignificant effect on Earnings per share of listed Commercial banks in Nigeria. The study, therefore, recommends that corporate managers, especially those within the banking sector, should engage in or drive policies that will promote the use of derivatives. This will increase the bank's holdings of derivative assets and derivative trading income to increase their earnings, which will, in the long run, enhance the performance of commercial banks in Nigeria. Financial Regulators should organize conferences and symposia for Commercial Banks to enhance their knowledge base on the effective use of financial market derivatives.
Keywords: Derivative Assets, Derivative Liabilities, Derivative Trading Income and Derivative Disclosure.

INTRODUCTION

Prices rise and fall according to market whims in economics and finance, and due to constant price volatility, uncertainty becomes a thought-provoking feature that can make or break returns on investment. Derivatives have arisen as financial tools for engineering contracts with fixed values and timelines that have shown to be answers to various economical problems. In its most basic form, a derivative agreement between two parties to conduct a financial transaction at a particular time and a predetermined price. In general, this renders derivatives futuristic. Financial derivatives are effective risk management instruments for reducing market risk exposure. They let manufacturers and consumers lock in pricing while ensuring supply and demand remain consistent. Investors and businesses can utilize them to protect themselves from unfavorable events by reducing the impact of changes in macroeconomic variables.

Derivatives are a robust risk management tool that shifts risk from individuals with a low appetite for risk to those with a high appetite for risk. They are used to protect against price swings that are not favorable. Derivative instruments offer more leverage than any other financial instrument. Interest rate and foreign currency derivatives shield a company's cash flow and earnings from adverse interest rate and exchange rate changes. Financial derivatives are standard tools financial institutions and corporations use in the money market to manage and hedge business risks (Gibson & Murawski, 2013; Hon, 2012). Financial derivatives offer a low-cost way to manage financial market risk without incurring additional fees.

Specifically, practically all firm activities (especially those of international scale) are tied to the international market circuit, exposing the company's cash flow to exchange rate fluctuations (Altuntas *et al.*, 2017). They are used by banks as a risk management strategy to prevent unforeseen events from obstructing their desired profit (Kasimu *et al.,* 2018). Financial derivatives have become so widespread and considered asset classes even though their values are often derived from one or more underlying securities that may belong to multiple asset classes. They are sometimes embedded in new debt and equity investment vehicles, as Valdivia-Velarde (2012) pointed out, which is often one of the reasons why the intricacies of these instruments make them very dangerous. These benefits encourage banks to position their businesses and improve their risk management efficiency so that risk management efficiency can be quantified to maintain value creation and avoid adverse events that may not have been adequately considered in the relevant business scenario (Zakaria, 2017).

Globalization has developed tight linkages in financial systems, allowing risks to spread swiftly, as evidenced by the devastation caused by the financial crisis of 2007–2008. Derivative instruments, conversely, are highly complicated since their values can be tied to nearly any underlying asset or obligation, including other derivatives, to achieve various goals. However, because recent research shows

that analysts frequently underestimate the earnings implications of a firm's derivatives activity (Chang et al., 2015), it is unclear whether and under what circumstances the use of derivatives would be a value-enhancing activity, expose investors to more risk and whether risk management through hedging would provide further development opportunities in derivative trading profits. The study, therefore, aimed to determine the effect of Financial Derivatives on the Financial Performance of listed Commercial Banks in Nigeria.

REVIEW OF LITERATURE

According to McDonald (2013), financial derivatives are financial instruments whose value is derived and determined from or by the price and performance of something else. The International Monetary Fund (IMF) defines a financial derivative as a "financial instrument tied to a specific financial instrument, indicator, or commodity and through which specific financial risks can be exchanged in financial markets." Financial derivatives are contracts, and the value of such contracts is determined by the performance of whatever the contracting parties pick as the 'underlying' asset. The assets from which a derivative contract derives its value, in other words, the 'underlying' could be equity, fixed-income instruments, commodities, and interest rates. Derivatives are now well-known among all businesses and are used for risk management and speculation. As a result, financial statements reflect a steady shift in using and reporting these derivatives by financial reporting regulatory bodies' disclosure requirements (Graham & Rogers, 2002). The awareness was in response to the global financial crisis of 2008-2009, which left a lasting impact on the global economy, with many countries still suffering from the consequences. Following that, experts have focused on determining the role of derivatives in the global economic crisis and devising strategies for corporations to deal with such situations in the future. According to Jason and Taylor (1994) and Stern and Lipin (1994), derivative trading for profit is extremely risky and can result in significant losses for the firm.

One of the significant developments in today's financial markets is the increased proclivity of banks to participate in derivative activity. Due to low-quality loan applicants, financial innovation, improvement, deregulation, and expansion of financial markets and banks' margins have recently reduced, demotivating these banks to give sophisticated services and products to expand their profits.

On the other hand, a significant growth in commercial banks' derivatives activity is due to rising credit, interest, and foreign exchange rate risk exposures that banks face in international and domestic markets. Using financial derivatives to manage risks is less expensive and could replace expensive capital, giving banks the flexibility to achieve their targeted risk exposures without compromising their original business goals. Companies participate in the use of derivatives through hedging operations due to the rapid pace of globalization, which protects them from various financial dangers. When measured, Hull (2011) argues that derivatives marketplaces are enormous and much larger than the equity market. As a result, whether we like derivatives or not, we cannot escape them. Furthermore, financial derivatives have progressively increased over the last few decades, so we now have a well-developed exchange trading market for these financial instruments, such as over-the-counter (OTC) and exchange-traded derivatives (ETD).Many organizations and firms engage in hedging operations, according to research published by the International Swaps and Derivatives Association, INC. on the financial market (ISDA, 2009).

Aside from corporations' usage of derivatives, various enforcements on the worldwide market have led to changes in how financial statements are generated and presented. As a result, many countries have adopted the principles of the International Financial Reporting Standards (IFRS). Firms must report whether or not they employ derivative contracts for hedging or trading purposes under the International Financial Reporting Standards (IFRS). Furthermore, this law requires businesses to disclose the likelihood of hazards they face and the steps they have taken to mitigate them. Financial derivatives are also tools for making financial markets work and for assisting in their development (Halilbegovic & Mekic, 2017). Due to their nature, derivatives are highly leveraged and require little to no upfront monetary commitment, making them a viable and appealing instrument for hedging market risk, cutting fund expenses, and managing assets. Derivative is traded between two parties, known as counterparties, bound by a set of terms and conditions defining their rights and responsibilities (NAPF, 2017).

Many research studies have found a link between financial derivatives and corporate success. The studies listed below have discovered a mixed bag of evidence. Financial derivatives, for example, reduce the impact of a company's creditworthiness and monetary policy transmissions (Fender, 2000); financial derivative hedging reduces systematic risk, increases profits, and provides abnormal returns to non-financial firms (Bartram *et al.*, 2011); and the use of options derivative trading increases innovative productivity and short-term performance (Bartram *et al*., 2011). (Blanco & Wehrheim 2015). According to

Stoll & Whaley (2010), using derivatives provides financial benefits to the firm, and the critical contribution of these derivatives is their leverage. That is, they create identical price exposure to the owners for a given purchase cost of the underlying asset. As a result, they provide a competent way of counterbalancing hedgers (risk transferors) and speculators, consistent with the findings of (Ahmed *et al*., 2014 and MacCarthy, 2017).

Derivative asset and performance

Derivative assets are contracts with a specified life period rather than hard physical assets. They are exchanged on global financial markets by buyers and sellers wagering on the price of the underlying asset represented by the derivative in the future(Sulaiman & Ibrahim, 2020).According to Deshmukh *et al*. (1983), commercial banks that use derivative assets have reduced interest rate uncertainty and enhanced their lending activities, resulting in higher returns than fixed fee-for-service activities returns. As a result, commercial banks that use derivatives assets to manage interest rate risk will have a more significant total benefit than those that do not. According to Ilyina (2004), using derivatives can help investors manage their financial risk exposure by allowing them to transfer and unbundle financial risk. Derivative instruments have become an increasingly important aspect of commercial banks' asset portfolios, which they utilize to offset interest rate and foreign exchange rate risk. Commercial banks have recognized the benefits of interest rate swaps and futures in reducing risk and achieving optimal financial performance as interest rate volatility rises.

Derivative liabilities and performance

Derivatives effectively lock down transactions over the primary asset due to their leveraged nature. It could be employed when a company or organization does not have an urgent need or competence to transact an underlying commodity fully but anticipates doing so in the future. A company or organization can lock in the price of a commodity at the current rate, hedging against the risk of shifting market prices for that item. This option enables the company to conduct a planned future transaction that is less expensive than anticipated (Rechtschaffen, 2014). As a result, derivatives protect against risk exposures such as commodity price changes or seasonal risks (Salami, 2012).

While diversification cannot eliminate market risks, hedging can help to mitigate them. Interest and inflation rate swaps create offsetting positions that help to mitigate risk. Pension funds can take advantage of favorable interest rates and inflation hedges by using liability-driven investment funds (LDI) or derivatives.

Derivative of trading income and performance

Individual and institutional investors are encouraged to join the secondary market and trade securities, according to the New Zealand Futures and Options Exchange (NZFOX) (2008), because derivatives reduce the risk of holding the underlying asset. This increases liquidity in the primary market because people are less hesitant to purchase new securities. According to Danthine (1978), more trade volume leads to greater depth in the cash markets because there are positive benefits from increased derivative trading activity; the derivatives' market depth role relates to liquidity influence. Increased derivative market depth is desirable because the more significant the transaction required to change the price of the security, the better the market depth. This maintains cash market stability, and the entire capital market becomes a lucrative means of savings and promoting higher levels of economic investment. According to Kavussanos *et al*. (2008), the derivative market allows enhanced transparency, development, and overall functioning in the capital markets by providing a cheap and efficient way to hedge and speculate. The derivatives market's efficiency and low-cost attributes make it a tempting investment option. As a result, there is less liquidity in the cash markets. Increasing underlying market liquidity is a crucial component of the derivatives market because it allows investors to readily sell their securities when they want without losing much money or significantly altering the price of the assets.

Financial derivative disclosure and performance

In recent years, corporate voluntary disclosure has received increasing attention. Such disclosures can be defined as disclosures that go beyond the rules, demonstrating management's free choice to give accounting and other information deemed relevant to the decision-making needs of annual report readers (Meek *et al.*, 1995). Understanding why companies voluntarily disclose information benefits both the preparers and users of accounting data and accounting policymakers (Meek *et al.*, 1995). Annual reports are a valuable source of information regarding a company's derivative activities. Derivative disclosures can help various users, including investors, shareholders, lenders, and financial statement analysts, better understand derivatives activities and make better decisions. Failure to disclose the risks these companies take can misrepresent their risks, exposing unwitting shareholders and investors to significant losses.

However, since the establishment of statutory financial instrument disclosure rules, there has been a significant improvement in derivative disclosures (Hassan *et al.*, 2007; Woods & Marginson, 2004). The disclosure assists users in comprehending why entities use derivatives (by describing the risks associated with the entity) and what they hope to achieve by doing so. In addition, corporations must provide information about hedging operations because financial instruments control risk associated with anticipated future transactions. Some scholars, such as Ameer (2009), Seow & Tam (2002), and Zhang (2009), provide empirical evidence that the mandatory accounting and reporting requirements for the use of derivatives add value to investors' assessments of corporate risk profiles. The information disclosed by the corresponding standard is highly relevant to market responses such as changes in equity price, equity return, and trading volume, indicating that the information mandated by derivative-related requirements has provided new and valuable information to financial statement users, particularly investors. As a result, such information is helpful for investors in evaluating corporate financial performance and the effects of related derivative operations and assisting them in making investment decisions.

Furthermore, high-quality disclosures can help investors and creditors reduce their uncertainties by increasing their confidence in financial statements produced by companies (Miller, 2002). This increases investment in these companies, resulting in higher share prices.

Theoretical Framework

The Modern Portfolio Theory

Harry Markowitz propounded the Modern Portfolio Theory (MPT) in 1952. The relevance of portfolios, risk, diversification, and the links between different types of securities are all discussed in this theory. The MPT promotes asset and security diversification and the benefit of not placing all eggs in one basket. He believes an investor can create an ideal portfolio to deliver maximum returns while assuming the least risk. It allows investors to use diversification tactics to build groups of assets that decrease volatility, making it one of the tools for minimizing market risk. The theory is a sophisticated investment decision-making strategy that assists an investor in classifying, estimating, and controlling the type and amount of projected risk and return. The Modern Portfolio Theory (MPT) differs from traditional security analysis in that it focuses on establishing the statistical links among the many securities that make up the entire portfolio rather than evaluating the features of individual assets (Elton & Gruber, 1997). Kasimu *et al*. (2018) conducted research that supports the Modern Portfolio Theory (MPT), which recommends asset diversification to protect against market and asset-specific risks. Modern portfolio theory and the usage of financial derivatives have one thing in common, which is to mitigate risk.

Arbitrage Theory

Arbitrage price theory is a model that deals with asset pricing in general. It assumes that an asset's return may be predicted based on its relationship with standard risk variables (Ross, 1976a, 1976b). Furthermore, it is anticipated in this theory that the market will automatically neutralize arbitrage events. For example, market transaction costs, various types of hazards, an endless flow of capital, and other arbitrage constraints imply that trade is riskier and more costly than the theoretical framework and, in some situations, may be impossible. The underlying assumption is that when mispricing rises, unlimited arbitrage trading will automatically drive the market price back to its fair value, and when actual arbitrage is not unattainable in the market (e.g., if finding a buyer of the underlying asset is difficult), that derivative model - "The Law of One Price," which advocates that when mispricing rises, unlimited arbitrage trading will automatically drive the market price back to its fair value (Figlewski, 2017). This is because the buyer's desire will be steered to the lower-cost market, whereas arbitrageurs will be willing to sell for a higher price and seek out higher-cost markets. The equilibrium will happen only when both markets have the same price (Figlewski, 2017).

As previously stated, arbitrageurs are always eager to profit from arbitrage chances risk-free. However, everyone wants to make such a profit if they are aware of a price differential between two marketplaces. However, because everyone wants to purchase in a lower-price market and sell in a higher-price market, the demand and supply theory of economics forces the price to shift to its equilibrium level. As a result, arbitrageurs engage in a risky business. In practice, though, these arbitrage events occur frequently. As a result, firms that use derivatives to protect themselves against price fluctuations from arbitrage.

Empirical Review

Orie *et al.* (2022) examined the effect of financial derivatives on the performance of deposit money banks in the Nigerian stock exchange between 2015 and 2021. Loan and advances, exchange rate, and financial derivative assets were used as the Independent variables, while profit after tax was the dependent variable. The findings show that loans and advances have no significant effect on the performance of deposit money

banks in the Nigerian stock exchange. Financial derivatives assets significantly affect the performance of deposit money banks in the Nigerian stock exchange.

Sulaiman and Ibrahim (2020) examined the effect of financial derivatives on the profitability of selected deposit money banks in Nigeria. Data was collected from the annual financial report for five years between 2012 and 2017, using a panel regression model. The model is positive and substantial, according to the results. FDA and LTC had a favorable and significant impact on deposit money bank profitability in Nigeria, whereas FDL had a negative and minor impact. As a result, the study suggests that financial derivatives favor and considerably impact deposit money banks' profitability in Nigeria. Ekadjaja and Henny (2019), in a study, examine the characteristics of the user's derivative company towards the company's value. The study's participants were companies listed in the Indonesia Stock Exchange's Sharia Stock Index between 2014 and 2016. The test revealed that Return on Asset and firm size variables strongly impact derivative consumers' company valuation. While capital expenditures and dividend yield had no significant impact on company value, the leverage variable had a considerable negative impact.

Kasimu *et al*. (2018) examined the effect of using financial market derivatives on the performance of deposit money banks in Nigeria. The findings show a favorable correlation between derivative financial assets and deposit money bank performance in Nigeria. As a result, the study indicated that the usage of derivatives is critical to the performance of Nigerian banks.

MacCarthy (2017) investigated the impact of financial derivatives on the performance of firms in the financial sector in Ghana. For 2011-2015, secondary data on financial derivatives, controllable business risks, and business success in terms of return on investment were employed. Data from 23 financial firms in Accra, Ghana, were randomly chosen. The result shows a significant positive link between financial derivatives and company risks. Ghana also had a substantial link between financial derivatives and corporate performance. Kiio and Jagongo (2017) investigated the influence of financial risk hedging practices on the performance of firms in NSE. The regression model results allowed the researcher to examine how using futures, forwards, options, or swaps to hedge foreign exchange, interest rate, and commodity price risks affected performance. The firm's financial statements for 2011-2015 provided information on return on invested capital (ROIC) and return on assets (ROA). The study discovered a link between hedging activities, the moderator (central bank controls), and listed firm performance.

Altuntas *et al.* (2017) explored the relationship between hedging, cash flows, and firm value. The study examined how derivatives hedging affects business value directly and indirectly through its effect on cash flow volatility. In the study, derivatives hedging and cash flow volatility do not align with company value. The study discovered that relying solely on derivatives reduces business value and performance. However, when the study looked at the influence of hedging on cash flow volatility, the hedgers' value was found to be less susceptible to cash flow volatility than non-hedgers' value. Lenee and Oki (2017) investigated financial derivatives on financial and non-financial firms' performance in the UK using Panel Least Square (PLS) regression. According to their findings, financial firms hedge more significant interest rate risks, while non-financial enterprises hedge more foreign exchange rate risks. Furthermore, both groups found that hedging interest rate risk with a combination of forwards and futures derivatives was positive and statistically significant with return on assets, whereas hedging foreign exchange rate risk with one or more financial derivatives was negative and statistically significant with return on capital employed.

Luo (2016) examined foreign currency derivatives and corporate value in China using the 30 largest listed firms in the Shanghai and Shenzhen stock exchanges between the first quarter of 2007 and the third quarter of 2013. A dummy variable was utilized for foreign currency derivatives, while firm value was proxied by Tobin Q, which was analyzed using the multivariate regression approach. Using foreign exchange derivatives provides a positive but small hedging premium to the average company value. Tijani and Mathias (2013) investigated corporate use of derivatives and financial risk management in Nigeria with evidence from non-financial firms. The study employed multivariate analysis and logistic regression analyses using SPSS version 18. The findings revealed very low usage of derivatives due to a lack of knowledge and the underdeveloped nature of our financial market. Bartram *et al.* (2009) considered a large sample of 7319 non-financial firms from 50 countries from 2000 to 2001 to investigate the relationship between the use of derivatives and firm value. The findings backed up the theory that hedging adds value to a portfolio. They also discovered that this positive correlation was stronger for interest rate derivatives and weaker for foreign exchange derivatives. Ameer (2009) investigated the relationship between firm value and the notional amount of FCD and IRD used by Malaysian firms from 2003 to 2007. The use of derivatives and firm value was significant and positive. They also showed that the notional quantity of derivatives generated value, but only a small amount.

Nguyen and Faff (2003) attempted to test the hypothesis of whether hedging by the use of financial derivatives is a value-enhancing strategy or not. The study used a sample of Australian firms from 1999 – 2000 and found that using general derivatives and FCD was associated with lower firm value. Allayannis and Weston (2001) examined the use of foreign currency derivatives on a sample of 720 large US non-financial firms. The study discovered that using Tobin's Q as a proxy for a firm's worth, the usage of currency derivatives boosts the firm's value. According to the study, enterprises exposed to foreign exchange risk and employ currency futures have a 4.87 percent higher value than firms that do not use currency derivatives.
From the literature reviewed, there is no empirical research on financial derivatives and earnings per share of listed commercial banks in Nigeria. Financial derivative components, such as financial derivative disclosure, were not adequately represented in the literature studied. When the derivative components are aggregated, and their impacts are investigated, this may not produce the intended result. If a company uses financial instruments to manage risk associated with anticipated future transactions, it must disclose information about hedge activities. High-quality disclosures reduce the uncertainties investors and creditors face by increasing their confidence in financial statements produced by companies.

METHODOLOGY

This study employed an ex-post facto research design, which involves collecting data acrossfirms on the same critical characteristics over a specific time to identify a common behavior trend amongst the firms. This study covers the banking sub-sector in Nigeria listed on the Nigerian Stock Exchange (NSE) market. Hence, the study intends to x-ray their published annual reports over time to establish the relationship between financial derivatives and firm performance.
Bryman *et al.* (2007) recommend that the larger the sample size, the more accurate the results will be; hence, we employ all fourteen (14) commercial banks in Nigeria listed on the Nigeria Stock Exchange as of 31st December2022. Furthermore, we note that this category of banks shows strong similarities in operating and reporting activities during the period under review. OLS estimation technique was employed, with a unit root test to check for stationarity and co-integration, and an error correction mechanism was employed to test for the long-run and short-run relationships among the dependent and explanatory variables. Panel data was collected annually based on variables captured in the model.

$EPS_{it} = \beta_0 + \beta_1 FDA_{it} + \beta_2 FDL_{it} + \beta_3 FDTI_{it} + \beta_4 FDD_{it} + \varepsilon_{it}$..1

The above models were used to achieve the objectives of the study. Whereβ = constant slope to be estimated and $\beta_1\beta_2\beta_3\beta_4$ are intercept and ε_i = error term. The principal dependent variable, EPS, represents Earning Per Share, and the independent variables, Financial Derivatives, were proxies by FDA = Financial Derivative of Assets, FDL = Financial Derivative of Liability, FDTI = Financial Derivative of Trading Income, and FDD = Financial Derivative Disclosure.

RESULTS AND DISCUSSIONS

Unit root tests

To ensure reliability, a unit root test was done to ensure that the variables employed in this study are mean reverting, i.e., stationary. The result of the Levin, Lin & Chu test to test for stationery is presented in Table 1.

Table1: Unit Root Test Table

Variable	LLC (Common P-value)	Order	Difference
EPS	0.0000	I(0)	Level
LOGFDA	0.0000	I(0)	Level
LOGFDL	0.0000	I(0)	Level
FDTI	0.0000	I(0)	Level
FDD	0.0000	I(I)	1st D

Null: There is a serial Unit Root in the data
Source: **Researcher's compilation 2023**

The table above shows the result of the first test required to know the common stationarity of the variables. For the common stationarity test, the Levin Lin Chu (LLC) test for common stationarity is interpreted using the p-value to ascertain the level of individual stationarities of the panel variable data.The unit root test result shows an LLC P-value less than 0.05 at different orders (0 & 1), which depicts common

stationarity at the level and 1st difference. It implies a need for a co-integration test to determine whether the study will adopt an error correction model for long-run adjustment.

Co-integration Tests

To ensure the level of co-integration of the data set, the ADF tau statistics probability value is considered to ensure a more robust test for co-integration.

For the model (EPS), the tau statistics is -2.298383, and Prob. of 0.0108 reveals a probability value of <0.05. Therefore, the co-integration test statistics reveal a co-integration of data for the series, which implies that in the short-run shocks, the data series will converge in the long run to absorb the short-run shocks. Therefore, there is no need for an error correction model.

Table 2: Regression Result

Test Summary		Chi-Sq.	Prob.
Cross-section random		4.93522 0	0.6679
Variable C	Co. eff. -139.8057	t-Statistic -0.725787	Prob. 0.4699
LOGFDA	98.26064	5.153570	0.0000
LOGFDL	-26.34416	-0.948181	0.3457
FDTI	6.297367	1.957817	0.0435
FDD	58.28248	0.938614	0.0504
R-squared	0.32		
Adjusted R-squared	0.310		
F-statistic	6.985979	Durbin-Watson stat	2.517759
Prob. (F-statistic)	0.00001		

Source: **Researcher's compilation 2023**

The EPS variable is estimated at -139.8057 units. This implies that when all independent variables are held constant, there will be a decrease in the *EPS* of listed commercial banks up to the tune of 139.8057 units occasioned by factors not incorporated in this study. Thus, a unit increase in LOGFDA will lead to an increase in EPS by 98.26064 units. Also, a unit increase in LOGFDL will lead to a decrease in EPS by 26.34416 units. Furthermore, a unit increase in FDTI will increase EPS by 6.297367 units. A unit increase in FDD will lead to an increase in EPS by 58.28248 units. Finally, the result shows a significant variation of Fisher's statistics (6.985979) at 0.00001 probability value, which means the model as a whole is statistically significant at an autocorrelation level of 2.517759 (Durbin-Watson).

HO1*:* Financial derivatives (LOGFDA, LOGFDL, FDTI & FDD) have no significant effect onearnings per share of listed commercial banks in Nigeria.

Since the calculated probability value for LOGFDA (0.0000), FDTI (0.04), and FDD (0.05) against EPS is less than/equal to the accepted probability value of 0.05. The null hypothesis is rejected, and the alternative is accepted. Thus, LOGFDA, FDTI, and FDD significantly affect earnings per share of listed commercial banks in Nigeria.

This finding is consistent with the similar outcomes of Orie *et al*. (2022) and Kasimu *et al*. (2018), which state that derivative assets significantly affect the performance of deposit money banks in Nigeria. Smith and Watts (1992) also concluded that firms that use derivatives in risk management show more growth opportunities and more convex tax functions than non-users. Similarly, we align our results with Bartram et al. (2009), who concluded that hedging is a firm's value-enhancing activity. In this study, we find strong evidence supporting the findings of Allayannis and Weston (2001), whose findings align with the hypothesis that firms exposed to foreign currency risk use foreign currency derivatives in hedging. Their study noted that firms that introduced hedging policies in their operation experienced higher performance than those of unhedged firms. Also, firms that quit after a while show a decline in their performance relative to those that remain hedged.

Furthermore, we share the same idea with Chaudhry *et al.* (2014) and Ahmed *et al*. (2014), who found a statistically positive relationship between financial derivatives and firm performance. Furthermore, our result showed that disclosure of financial derivative usage is value-enhancing, and investors are rewarded

when financial derivative usage is disclosed. International Financial Reporting Standards (IFRS 7) require reporting the instruments' financial derivative use and associated risks. We also find it consistent with the findings of Dadalt *et al*. (2002), who emphasized that hedging and proper disclosure of hedging activities improve the informational quality of financial reports and reduce information asymmetry between managers and outsiders.

Financial derivative liabilities were statistically insignificant, which is consistent with the position of Hagelin *et al*. (2007), who concluded that firm performance decreases when a firm is involved in hedging activities on the motive of the manager's stock options. This reduction in firm performance is due to managers who usually hold risk avert motives and protect their claim on the firm's assets due to stock options they hold.

CONCLUSION AND RECOMMENDATIONS

The development of the derivatives market is an offspring of modern globalization and liberalization of the world economy. A closed economy can also be predictable but poor, while an open economy can be wealthier as gains from trade are realized, but they are also riskier. The growth of financial derivatives, particularly derivative markets, helps to enhance the effectiveness of monetary policy by speeding up the transmission process and influencing expectations, thus adding power or credibility to the process. Derivatives help alter international transmission by making arbitrage less expensive and reducing transactional transmission using market size. The rationale behind the use of derivatives is that, by lowering transaction costs, it increases liquidity period. Compared with equivalent transactions in underlying assets, financial derivatives can reduce the occurrence of large funds. The financial system will improve through promoting development-oriented policies like derivatives programs. On this premise, we analyzed to empirically test the effect of financial derivatives and financial performance of listed commercial banks that fall within the Central Bank of Nigeria (CBN) in Nigeria. The results show that financial derivative usage significantly affects the financial performance of commercial banks in Nigeria.

Therefore, the study recommends that corporate managers, especially those within the banking sector, engage in/drive policies promoting the use of derivatives. This will increase the bank's holdings of derivative assets and derivative trading income to increase their earnings, which will, in the long run, enhance the performance of commercial banks in Nigeria. The study also advises the government on creating an environment that enables a stable and conducive derivative market for such banks to thrive effectively. Furthermore, commercial banks in Nigeria should minimize their financial derivative liabilities holdings. This is in response to the adverse effect of the derivative liability variable on firm performance. Financial regulators should organize conferences and symposia for commercial banks to enhance their knowledge base on the effective use of financial market derivatives.

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ARTIFICIAL INTELLIGENCE AND BUSINESS SUSTAINABILITY IN SUB-SAHARA AFRICA

Idu, Melvin A., Onodi, Benjamin E. and Nwosu, Uzochukwu
Department of Accounting, Michael Okpara University of Agriculture, Umudike
Corresponding author: benonodi@yahoo.com

ABSTRACT
This study examined artificial intelligence and business sustainability in Sub-Sahara Africa. Anex-post facto research design was adopted. Data were generated using secondary data from annual reports and accounts of selected multinational firms from 2013 – 2022. The data were analyzed using simple regression analysis. The finding revealed that artificial intelligence has no significant effect on the economic reporting of multinational firms in Sub-Sahara Africa. Also, artificial intelligence has a significant effect on the environmental reporting of multinational firms in Sub-Sahara Africa.Based on the findings, the researchers recommend that Sub-Saharan African firms should embrace AI-specific measures such as sharing best practices and supporting new and innovative AI applications for fighting climate change. However, they should be guided in order not to throw unskilled workers out of their jobs. Initiatives like skill acquisition and entrepreneurship should be encouraged by governments of developing countries to reduce unemployment that may arise as a result of the deployment of AI systems.Displaced workers can be trained and deployed in the most sustainable way possible while minimizing negative impacts for the good of the planet. Environmental preservation and regeneration of the ecosystem are paramount for sustainable development. This will enable artificial intelligence to have direction and function effectively towards ensuring that business sustainability is achieved.
Keywords: Artificial Intelligence, Technology acceptance model, Business innovations, sustainability reporting and Sub-Sahara Africa.

INTRODUCTION
Business innovation calls for the application of Technology, which is one of the major influential factors in an industry. We are in the science and technology age, or instead, the Fourth Industrial Revolution era. Digital technologies like machine language (ML) and artificial intelligence (AI) are available for day-to-day operation activities, which will push transformation in business to the next level, and Sub-Sahara Africa should be included in the crusade for business sustainability. As stated by Abrams *et al*. (2019), in computer science, artificial intelligence is referred to as machine intelligence, whereby natural intelligence is less focused now, and machines play the role of intelligence for organizations. Jain (2017) and Yawalker (2019) observed that increasing pressures in business have made it possible for artificial intelligence to gain ground in the overall system of organizations, particularly in human resource management.Abubakar et al. (2019) and Buzko *et al*. (2016) noted that artificial intelligence in human resources (HR) helps to support and develop a successful workforce in the organization.It has been argued that IT can produce visible impactswhen integrated with the ecosystem of businesses, especially on the relationship between the company and its customers, prospects, and partners.

Developing economies are embracing AI and Machine Learning (ML), and they are rapidly evolving and transforming political, economic, and social landscapes. AI-based solutions have emerged as a game-changer with significant consequences for increasing financial access to people with low incomes (Kshetri, 2021). AI has helped solve some local problems in Africa, such as an AI chatbot system that monitors sexual and reproductive health in Kenya (Yeboah, 2021). In Nigeria, there is an intelligent farming system where AI-powered drones monitor and track illegal fishing (Yeboah, 2021). Vinuesa (2020) observed that AI provides many opportunities and dramatically contributes to a broad range of Sustainable Development Goals (SDGs), including poverty reduction, educational quality for all, portable water and sanitation, affordability and clean energy, peace and justice, and strong institutions. There is no doubt that the more significant impact of AI has been felt in advanced economies like Europe, Asia, North America, and the UK. However, its effect is hardly seen in Sub-Saharan Africa. Cisse (2018) noted that a lack of diversity in AI could perpetuate unanticipated algorithmic biases and create discrimination in AI products, particularly in Africa. It is envisaged that the disparity in the number of AI researchers implies that there will be fewer opportunities to apply AI to better Africans' lives. People need to think of efficient utilization of AI and robotics applications in African firms. The AI index revealed that the African continent scored

among the lowest regions on average because of a few countries' readiness to implement AI as part of their countries' policies.

Business organizations in developed countries have adopted artificial intelligence and technology innovation. Most businesses in developed countries have reduced their workforce due to the adoption of AI, thereby reducing operating costs and maximizing profitability. Unfortunately, this is not so in developing countries like Sub-Saharan Africa. The rate of AI use in Sub-Sahara Africa is very minimal, suggesting that business organizations in this region failed to take advantage of AI and other technological innovations. Wamba-Taguimdje (2020) identified a positive association between artificial Intelligence and performance at both organizational and process levels. Oke (2008), Miler (2017), Zehong and Zheng (2018), and Margaret (2018) have also found a positive association. From the past literature, the studies have been done basically in a theoretical context. In developed countries, a minimal number of studies have been undertaken in Sub-Sahara Africa. In view of the research gap and problem observed as found in the above tasks, the researchers aimed to provide an answer to the nexus between artificial intelligence and economic reporting of businesses in Sub-Sahara Africa by examining how artificial intelligence affects environmental and social reporting among businesses in Sub-Sahara Africa.

REVIEW OF LITERATURE

Sustainable Development and Artificial Intelligence

The United Nations (UN) in 2009 defined the Millennium Declaration's goal of halving extreme poverty, which is defined as having less than $1.25 per day by 2015.Brundtland, 1987 posits that the United Nations (UN) specifically contributed to the idea of sustainable development. In fact, the UN authored one of its most cited definitions: "Development that meets the needs of the present without compromising on the ability for future generations to meet their needs". About 191 United Nations member states at the time, and at least 22 international organizations, were mandated to help achieve the following Millennium Development Goals by 2015 as follows:To eradicate extreme poverty and hunger;to achieve universal primary education;to promote gender equality and empower women;to reduce child mortality;to improve maternal health;to combat HIV/AIDS, malaria, and other diseases;to ensure environmental sustainability; andto develop a global partnership for development.

In the advanced economy, Artificial Intelligence is used to monitor and evaluate the sustainability of companies and to link investment in companies to specific sustainability criteria. There are also promising projects and approaches in nature conservation and environmental monitoring that use AI methods to monitor and evaluate sustainability commitments. Yeboah(2020) stated that Andrew Ng, a leading Artificial Intelligence (AI)-focused computer scientist and entrepreneur at the AI Frontiers Conference, exclaimed that “AI is the new electricity.” He explained by further stressing that “Just as electricity transformed almost everything 100 years ago, today, I have a hard time thinking of an industry that I don’t think AI will transform in the next several years”. As observed by the International Finance Corporation (2021), Artificial intelligence (AI) has vast potential to facilitate Human Intelligence (HI) and revolutionize how people utilize products and services, acquire information, create products, and interact. PwC Global (2017) highlighted in its report that by 2030, AI would increase the world’s Gross Domestic Product (GDP) to 15.7 trillion, a forecasted $6.6 trillion to productivity and $91.1 trillion to consumption effect. AI has progressed from an academic subject to a vital element in social and economic mainstream technologies such as banking, medical diagnostics, self-driving cars, and voice-activated machines that enhance people's daily lives (Mhlanga, 2020). Google Maps, Uber and Lyft rides, Facebook suggestions, spam filters in email, online shopping, and cancer detection are just a few examples of AI technology that has made life easier (Marco, 2019). Businesses are competing to become AI corporations because of the incredible speed with which AI is invading every industry (Soni *et al*., 2019).

Business innovation and artificial intelligence

Business innovation is a general concept, as observed by Ward (2020) cited in Uzokife (2023) that can apply to many different products, services, efforts, and policies. This includes new products that will better serve customers or a new program that will help employees better communicate about projects they are working on.Innovation comes up with a new way to do things, and those new ways of doing things are introduced with the goal of earning the business more money. It is believed that any effort by entrepreneurs to find new ways of improving a business venture means dabbling into business innovation. Information Technology (IT) is an excellent example of innovation because it calls for the application of technology to create a more vibrant and efficient organization. As further stated by Uzokife (2023), the purpose of the business innovation process is to create value for the organization. This is made possible

through creating new revenue opportunities, driving more revenue from existing channels, creating efficiencies that save time, money or both, or from improvements to productivity or performance.

Artificial intelligence is considered a business innovation because it has the potential to facilitate human intelligence and revolutionize how people utilize products and services, acquire information, and create products and interactions (IFC, 2021).Although critics argue that the implementation of AI in automated in-house production services may also dislocate and pressure the wages of low-skilled workers and is starting to impinge on the employment prospects of middle-skilled workers, with only the most responsible creative or supervisory roles remaining, there are a tremendous increase in sales volume and profitability of firms that adopted artificial intelligence. In Sub-Sahara Africa, where AI innovation is relatively new, skill acquisition and entrepreneurship should be encouraged by governments to reduce unemployment that may arise as a result of the deployment of AI systems. Displaced workers can be trained and deployed in the most sustainable way possible while minimizing negative impacts for the good of the planet. There is no doubt that the growth in data availability, connectivity development, and the increase in electronic devices has allowed for further advances in AI adoption in Africa. AI provides many opportunities and dramatically contributes to a broad range of sustainable development goals, including poverty reduction, educational quality for all, portable water and sanitation, affordability and clean energy, peace and justice and strong institutions, as observed by Vinuesa (2020).

Pillars of Sustainability Disclosures

Three pillars of sustainability consist of the following:

Economic pillar: This is otherwise known as the profit pillar. Economic sustainability describes the ability to ensure fair and equitable distribution and efficient allocation of resources. It defines strategies that promote the utilization of economic resources to the best advantage. Economic sustainability ensures that economic growth maintains a healthy balance with our ecosystem. Economic sustainability refers to the ability of an economy to support a defined level of economic production indefinitely. Baboukardos and Rimmel (2016), cited in Etim *et al*. (2021), posit that Economic sustainability disclosure encapsulates all information that covers all the firms' impact on the economic conditions of all the stakeholders and economic systems at domestic, national and global levels. The economic disclosure component of sustainability reportage is captured in the financial statements or reports that are produced at the end of every financial year.

Environmental pillar: This is also known as the planet pillar. Environmental sustainability advocates for a conservative use of the natural resources endowed on the environment. These resources are not unlimited; hence, our environment must be protected from exploitation and neglect. Environmental sustainability occurs when processes, systems, and activities reduce the environmental impact of organizations' facilities, products and operations. Environmental sustainability supports initiatives like renewable energy, reducing fossil fuel consumption and fishery, organic farming, tree planting, reducing deforestation, recycling and better waste management. Environmental sustainability disclosure deals with the reportage of the effect of the organizations' activities that directly or indirectly impact the environment or the ecosystem. Various aspects of this disclosure include activities that cause pollution, gas flaring, erosion, and climate change (Baboukardos & Rimmel, 2016).

Social pillar: This is usually termed as people's pillar. Social sustainability is the ability of the social system, for example, a country, family or organization, to function at a defined level of social well-being and harmony indefinitely. It advocates the idea of an ethical responsibility towards human equality, social justice and poverty reduction. The social aspect of sustainability focuses on balancing the needs of the group. This pillar supports initiatives like peace, social justice, poverty reduction and other grassroots movements that promote social equity. The social aspect of sustainability disclosure, as observed by Etim et al. (2021), deals with how the activities of the organization affect the entire social systems, social strata, culture, and norms, as well as community relations.

Sustainability reporting is an Accounting performance measurement designed to go beyond the report on financial information. It brings about reports on the impact of the organization's activities on the planet and the people that dwell in it. Sustainability reporting is voluntary, as practised by multinational firms in Nigeria. The reporting was standardized, as any legislation on what to report did not guide companies. A sustainability report is vital because it enhances corporate issues and reports. It is comprised of economic, social and environmental. Sustainability reporting is the process of disclosing the performance of firms regarding the practice of sustainable development to both internal and external stakeholders (Emeka-Nwokeji, 2019). Likewise, Onoh *et al*. (2021) opined that sustainability reporting is the disclosure of an integral approach to sustainable issues, which is driven by stakeholders' pressure and legislative and ethical reasons. According to Hafni and Priantinah (2018), sustainability reporting is the practice that

encompasses a company's value, governance model and approach towards creating a sustainable global economy. In the same vein, Ratanacharoenchai *et al*. (2017) explained that sustainability reporting is the reporting system that enhances transparency and the reputation of the firm and meets the interests of the stakeholders. Therefore, sustainability reporting refers to the disclosure of non-financial information following four main aspects of economic, environmental, social and governance sustainability strategically. Thayaraj and Karunarathne (2021) observed that there is an increase in companies that are now integrating environmental, social and governance sustainability (ESG) dimensions in their annual reports both in developed and developing countries, which shows that companies are promptly responding to the concerns of their stakeholders. Sustainability reporting is based on four dimensions: economic, environmental, governance and social sustainability practices. Various bodies have developed sustainability guidelines, among which are GRI. The GRI sustainability framework has been globally recognized as an international reference for companies on sustainability reporting. Thus, this study developed its sustainability reporting index based on the GRI performance indicators from economic, social and environmental dimensions. Stakeholders often see Reporting of economic, environmental and social sustainability performance as a platform to build the ethical reputation of firms **(**Nwobu, (2015). An ethical reputation can translate to an increase in demand for the shares of the firm. Investors are interested in corporate responsibilities that can guarantee long-term sustainability and not just profit maximization (Emeka-Nwokeji, 2019).

Table 1: Sustainability reporting indicators

Environmental	Social	Economic
Energy	Community involvement	Economic performance
Water	Anti-corruption behaviour	Market presence
Carbon emission	Human right	Indirect economic impact
Waste management	Employee health and safety	Value and supply chain
Compliance	Labour and industrial relation	Risk management
Product and service stewardship	Training and development	
Biodiversity	Philanthropy	
Transportation	Diversity and equal opportunity	

Source: Global Reporting Initiatives, (GRI) 2011.

Sustainability Analysis

The sustainability analysis investigates what sustainability means for the system under development and how the sustainability of the application's domain context will be impacted by the system(Penzenstadler, 2018). To structure this analysis, two concepts are used: sustainability dimensions and orders of impact. The sustainability dimensions are individual, social, economic, technical, and environmental.

We refer to the definition of sustainability dimensions found in (Becker et al., 2016) as follows:

i). The individual dimension covers individual freedom and agency (the ability to act in an environment), human dignity, and fulfilment. It includes individuals' ability to thrive, exercise their rights, and develop freely.

ii). The social dimension covers relationships between individuals and groups. For example, it covers the structures of mutual trust and communication in a social system and the balance between conflicting interests.

iii). The economic dimension covers financial aspects and business value. It includes capital growth and liquidity, investment questions, and financial operations.

iv). The technical dimension covers the ability to maintain and evolve artificial systems (such as software) over time. It refers to maintenance and evolution, resilience, and the ease of system transitions.

v). The environmental dimension covers the use and stewardship of natural resources. It includes questions ranging from immediate waste production and energy consumption to the balance of local ecosystems and climate change concerns.

Theoretical background

This study is anchored on the Technology acceptance model (TAM). TAM is a theory propounded by Davis in 1989, cited in Abrams et al. (2019). The theory talks about the adoption, acceptance and usage of technology. Artificial intelligence is information technology. Many experiments have shown that this theory firmly explains the adoption of information technology. The TAM proposes two factors that influence organizational intention to use new tools; they are considered valuable to use. The AI procedure applied by information technology proves that the higher the usefulness, the easier it is to use, and the more users will be. Both factors affect a person's attitude towards using the system, influencing the intention to use behaviour (intent to use, IU). Surendran(2012) opined that TAM is aided in resolving

critical challenges in the field of information technology. Deciding between the adoption of any new technology by an individual or group is complicated, and the results are the adoption or rejection of the technology. Factors underlying the acceptance of technology are determined by the attitude and intention of using the product. This, in turn, depends on the use as well as the ease of using the product and, thus, the satisfaction of customers. The usage of AI is still a challenge for most organizations, especially in Sub-Sahara Africa, due to a need for knowledge and learning about the usage or application of such services. It is believed that a lack of understanding of the applicability of AI by business organizations is the primary reason for its low usage. However, TAM explains why business organizations should adopt AI for the purpose of enhancing their sustainability.

On the economic dimension of sustainable development, substantial investments have been made by the governments in advanced continents, and it was predicted that by 2022, 40% of customer-facing employees and government workers will consult an AI-powered virtual agent every day for decision-making or process-related support (Andrews, 2018). Governments of countries with advanced economies and large technology companies, such as the United Kingdom (UK) and France, are investing in the implementation of AI to create a competitive advantage. Cerulus(2022) posits that the government of the United Kingdom (UK) announced a £1 billion deal to put the nation at the forefront of the AI industry. In the same vein, France has investedabout 1.5 billion into AI research. Such investments give advanced economies a competitive advantage at the national level; however, there are no appreciable investments in AI in Sub-Sahara Africa. It was noted that they also have negative impacts on the globalization of production and services. Hawking(2018) opined that critics argue that the implementation of AI in automated in-house production services may also dislocate and pressure the wages of low-skilled workers, and this is starting to impinge on the employment prospects of middle-skilled workers, with only the most responsible creative, or supervisory roles remaining.

In the case of the environmental dimension of sustainable development, AI-Jarrah et al. (2006) report on the impacts of improved waste management by using fuzzy inference models, which may be helpful in helping us take better care of the planet in terms of supporting waste and pollution management. Predictive systems can be used for earthquakes and weather forecasting to recognize better the likelihood of extreme event occurrences such as hurricanes and tsunamis.Ramachandran et al. (2017) proposed a modified Environmental Vulnerability Index (EVI) to assess the environmental impact of aviation on connected cities.Iglinski et al. (2017) point to the potential of autonomous vehicles to reduce greenhouse gas emissions through less fuel consumption. AI can also have a negative impact on the environmental dimension, mainly due to the contribution it makes towards the further acceleration and consumption of technological devices. It was observed that the increase in the production and consumption of technological devices would have two adverse effects, namely planned obsolescence and depletion of natural resources. The acceleration of technology is closely interlinked with planned obsolescence, which means designing products that wear out "prematurely" (i.e., have valuable lives that were well below customer expectations). However, the rise of AI could potentially amplify these negative impacts by further automating extraction in more complex environments that are dangerous to human operators.

For the social dimension, Wisskirchen et al. (2017) opined that AI systems could help strengthen communities by helping with various minor roles of supporting the development of networks, conducting the administration and facilitation of collaboration, and taking over simple tasks in households, nursing, and teaching. It was noted that there are benefits as well as dangers; there is the chance to strengthen communities, but there is also a requirement to develop legal frameworks around AI, and all of the strengths and weaknesses here come with the threat of turning over too much power to AI. Nevertheless, AI can assist in a task such as classroom teaching. Similarly, Serholt et al. (2017) argue that several ethical issues need to be examined, such as the privacy of children's data, the boundaries of responsibility between teachers and robots, and the potential for AI's negative influence.Other areas where social interactions are being automated are social media and online community management. As the number of users in online services increases, the manual management of users becomes increasingly challenging. Hence, the adoption of AI systems in Sub-Saharan African businesses is imperative.

METHODOLOGY

This study adopted an ex post facto research design. The population of the study is made up of all 46 Sub-Saharan African Countries. Sub-Sahara Africa is grouped into four regions, namely, Central Africa, South Africa, East Africa and West Africa. Judgmental sampling was used to select one country from each region. The selection is based on two conditions. (i) The country must have a recognized multinational firm, and (ii) the firm must engage in artificial intelligence. In this regard, four countries were judgmentally

selected. The selected countries are Cameroon, Kenya, South Africa and Nigeria. The study covered a period of 10 years ranging from 2013-2022.

Table 3: Sample size distribution

S/N	Regions	Countries	Multinational companies
1	Central Africa	Cameroon	Coca Cola
2	East Africa	Kenya	East African Breweries
3	Southern Africa	South Africa	MTN Group
4	West Africa	Nigeria	Nestle Plc

Source: Researchers' field survey, 2023

This study used indicators supplied by the GRI Sustainability Reporting Framework (2011) in Table 2.1 above for each of the sustainability dimensions analysis. The sustainability index is calculated as a simple average of the total index achieved for each sustainability disclosure dimension. In line with previous studies such as Laskar (2018), this study used content analysis to create an index for each sustainability dimension by quantifying the data obtained from the audited financial reports of the multinational firms for each year based on the frequency of indicators disclosed (occurrence) and the nature or quality of those indicators (quantitative or narrative). If a corporation reveals an indicator (i.e. incidence), we give it a 1; otherwise, we give it a 0. Additionally, if the multinational firm uses artificial intelligence, we give it a 1; otherwise, we give it a 0. Finally, we obtained the average sustainability disclosure index by taking a simple average of the total index score (TOD) obtained for all indicators in a dimension.

Model Specification

The model specification is as follows:

$ECR_{it} = \beta_o + \beta_1 AI_{it} + e_i$.. model 1

$ENVR_{it} = \beta_o + \beta_1 AI_{it} + e_i$..model 2

$SOR_{it} = \beta_o + \beta_1 AI_{it} + e_i$..model 3

Where;

ECR = Economic Reporting

ENVR = Environmental reporting

SOR = Social cost

AI = Artificial intelligence

β_o= constant intercept term

β_1= slope coefficient

e = stochastic disturbance term

t = period of data.

i = cross-section of firms.

Decision rule: Accept the null hypothesis if the p-value is less than 0.05 or 5% level of significance; otherwise, reject and accept the alternate hypothesis.

RESULT AND DISCUSSIONS

A regression analysis was carried out to estimate the effect of artificial intelligence, innovation, and business sustainability in Sub-Sahara Africa. Artificial intelligence was used as the independent variable, while economic reporting (ECR), environmental reporting (ENVR) and social reporting (SOR) were used as measures for business sustainability. As a way of determining the overall significance of the model, in this study, the adjusted R square, coefficient of determination, and F statistic were used. Using the F-statistic and T-statistics, variables were analyzed to determine their relationship.

Table 4: Effect of Artificial Intelligence on economic reporting of multinational firms in Sub-Sahara Africa

Dependent Variable: ECR
Method: Least Squares
Date: 08/06/23 Time: 13:36
Sample: 1 40
Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.000000	0.063818	15.66967	0.0000
AI	0.071429	0.076277	0.936442	0.3550

R-squared	0.022556	Mean dependent var	0.950000
Adjusted R-squared	-0.003166	SD dependent var	0.220721
SE of regression	0.221071	Akaike info criterion	-0.131963
Sum squared resid	1.857143	Schwarz criterion	-0.047519
Log-likelihood	4.639264	Hannan-Quinn criter.	-0.101431
F-statistic	0.876923	Durbin-Watson stat	1.016484
Prob(F-statistic)	0.354959		

Table 4 above revealed the ordinary least square-based simple regression analysis results on the effect of artificial intelligence (AI) on economic reporting (ECR) of multinational firms in Sub-Sahara Africa. The R-square has a value of 0.022, which implies that 2.2% of the total variation in the dependent variable (ECR) is caused by the explanatory variable (AI). In comparison, the remaining 97.8% of the variation in the dependent variable was unaccounted for. Therefore, the 97.8% could be explained as other factors/variables not captured in the model. The T-statistic of 0.936442 with the probability (sig) value of 0.3550 (greater than a significant value of 0.05) implies that the model is not statistically significant at 0.05. The AI has a positive coefficient value of 0.071429, indicating that a 1% increase in AI will lead to about 0.071429% increase in ECR.

Hypothesis one

$H0_1$: Artificial intelligence has no significant effect on the economic reporting of multinational firms in Sub-Sahara Africa.

To test the hypothesis, The T-statistic of 0.936442 with a p-value of 0.3550 per cent level of significance was shown in Table 4 above. Since the p-value of 0.3550 is greater than 0.05, we would rejectthe null hypothesis, which states that artificial intelligence has no significant effect on the economic reporting of multinational firms in Sub-Sahara Africa. We therefore conclude that AI has a positive and significant effect on the economic reporting of firms in Sub-Sahara Africa. This finding is in agreement with Himanshu, Chandrika and Rabindra (2021), who assessed the influence of AI on the operating performance of the companies because their study found that artificial Intelligence has a significant influence on companies' operating costs as well as operating profit.

Table 5: Effect of Artificial Intelligence on environmental reporting of multinational firms in Sub-Sahara Africa

Dependent Variable: ENVR
Method: Least Squares
Date: 08/06/23 Time: 13:38
Sample: 1 40
Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.000000	0.123582	8.091781	0.0000
AI	0.464286	0.147709	3.143247	0.0032

R-squared	0.206349	Mean dependent var	0.675000
Adjusted R-squared	0.185464	SD dependent var	0.474342
SE of regression	0.428101	Akaike info criterion	1.189793
Sum squared resid	6.964286	Schwarz criterion	1.274237
Log-likelihood	-21.79585	Hannan-Quinn criter.	1.220325
F-statistic	9.880000	Durbin-Watson stat	0.780586
Prob(F-statistic)	0.003235		

Table 5 above shows the ordinary least square-based simple regression analysis results of the effect of artificial intelligence (AI) on environmental reporting (ENVR) of multinational firms in Sub-Sahara Africa. The R-square has a value of 0.206, which implies that 20.6% of the total variation in the dependent variable (ENVR) is caused by the explanatory variable (AI). In comparison, the remaining 79.4% of the variation in the dependent variable was unaccounted for. Therefore, the 79.4% could be explained as other factors/variables not captured in the model. The T-statistic of 3.143247 with the probability (sig) value of 0.0032 (less than the significant value of 0.05) implies that the model is statistically significant at 0.05. The AI has a positive coefficient value of 0.464286, indicating that a 1% increase in AI will lead to about 0.464286% increase in ENVR.

Hypothesis two

$H0_1$: Artificial intelligence has no significant effect on environmental reporting of multinational firms in Sub-Sahara Africa.

To test the hypothesis, The T-statistic of 3.143247with a p-value of 0.0032 per cent level of significancewas shown in Table 2 above. Since the p-value of 0.0032 is lessthan 0.05, we would acceptthe null hypothesis and reject the alternative hypothesis, which states that artificial intelligence has a significant effect on the environmental reporting of multinational firms in Sub-Sahara Africa.This finding did not support the finding of Tian, Wu, and Xiao (2023), who researched the impact of artificial intelligence orientation on enterprise green innovation and found that AI has a significant positive effect on enterprises' green innovation.

Table 6: Effect of Artificial Intelligence on social reporting of multinational firms in Sub-Sahara Africa

Dependent Variable: SOR
Method: Least Squares
Date: 08/06/23 Time: 13:37
Sample: 1 40
Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.750000	0.118072	6.352032	0.0000
AI	0.071429	0.141124	0.506142	0.6157

R-squared	0.036696	Mean dependent var	0.800000
Adjusted R-squared	-0.019443	SD dependent var	0.405096
SE of regression	0.409015	Akaike info criterion	1.098577
Sum squared resid	6.357143	Schwarz criterion	1.183021
Log-likelihood	-19.97153	Hannan-Quinn criter.	1.129109
F-statistic	0.256180	Durbin-Watson stat	0.948636
Prob(F-statistic)	0.615681		

Table 6 above shows the ordinary least square-based simple regression analysis results of the effect of artificial intelligence (AI) on social reporting (SOR) of multinational firms in Sub-Sahara Africa. The R-

square has a value of 0.037, which implies that 3.7% of the total variation in the dependent variable (SOR) is caused by the explanatory variable (AI). In comparison, the remaining 96.3% of the variation in the dependent variable was unaccounted for. Therefore, the 96.3% could be explained as other factors/variables not captured in the model. The T-statistic of 0.506142 with the probability (sig) value of 0.6157 (greater than a significant value of 0.05) implies that the model is not statistically significant at 0.05. The AI has a positive coefficient value of 0.071429, indicating that a 1% increase in AI will lead to about a 0.071429% increase in SOR.

Hypothesis three

$H0_3$: Artificial intelligence has no significant effect on the social reporting of multinational firms in Sub-Saharan Africa.

To test the hypothesis, The T-statistics of 0.506142 with a p-value of 0.6157 per cent level of significance was shown in Table 6 above. Since the p-value of 0.6157 is greater than 0.05, we would rejectthe null hypothesis, which states that artificial intelligence has no significant effect on the social reporting of multinational firms in Sub-Sahara Africa.This is in agreement with the findings of Khakurel *et al.* (2021). They examined the Rise of Artificial Intelligence under the Lens of sustainability and concluded that there is a significant impact on all five dimensions of sustainability studied.

CONCLUSION AND RECOMMENDATIONS

This studyconcludes that artificial intelligenceinfluences the environmental dimension of sustainability reporting in Sub-Sahara Africa,while AI has no significant influence on the economic and social variables investigated. On an environmental level, artificial intelligence can impact waste and pollution management and can also negatively impact sustainability in the form of power and resource consumption. On the social level, artificial intelligence can assist communities in managing social media, automating routine tasks that are commonly outsourced. All stakeholders involved in the operation of firms in Sub-Sahara Africa should make sound ethical decisions based on values commonly shared amongst citizens for the joint vision of sustainable development. Based on the findings, the following recommendations were made; Sub-Saharan African firms should embrace AI-specific measures such as sharing best practices and supporting new and innovative AI applications for fighting climate change, but be guided in order not to throw unskilled workers out of the job. Initiatives like skill acquisition and entrepreneurship should be encouraged by governments of developing countries to reduce unemployment that may arise as a result of the deployment of AI systems.Displaced workers can be trained and deployed in the most sustainable way possible while minimizing negative impacts for the good of the planet.

Environmental preservation and regeneration of the ecosystem are paramount for sustainable development. While engaging in artificial intelligence, multinational firms should also adhere to global reporting initiatives (GRI); this will enable artificial intelligence to have direction and function effectively towards ensuring that business sustainability is achieved.

Multinational firms should configure their artificial intelligence in such a way that they will be functioning in agreement with GRIfor the overall benefit of society. Communitiesand people will be better off whensound ethical decisions based on values commonly shared amongst citizens for the joint vision of sustainable development are taken.

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SUB THEME
HUMAN CAPITAL DEVELOPMENT, KNOWLEDGE AND RESPONSIBLE MANAGEMENT FROM AFRICA PERSPECTIVE

EFFECT OF ORIENTATION ON EMPLOYEES' PRODUCTIVITY IN FIRST CITY MONUMENT BANK PLC, ABIA STATE, NIGERIA

Evans-Obinna, Rosemary. N. and Emerole G. A.
Department of IRPM, College of Management Sciences
Micheal Okpara University of Agriculture, Umudike, Abia State, Nigeria
Corresponding author: abturker2002@gmail.com

ABSTRACT
This study examined the effect of orientation on employee productivity in Abia State, Nigeria. The researcher employed a descriptive survey method. The population comprised one hundred and ninety-six (196) bank staff members using purposive sampling. Major findings revealed that job-specific orientation significantly affects employee productivity in First City Monument Bank PLC, Umuahia and Abaas well as Social and Conventional orientation. The study concluded that there is a high relationship between orientation and employee productivity concerning First City Monument Bank in Abia State. Recommendations were made to improve employees' productivity through job-specific, social, and conventional orientation.
Keywords: Conventional, Employee, Orientation, Productivity, Social, Job-Specific

INTRODUCTION

Today, the world has been converted into a global village, and as a result, organizations and employees are sure to face national and international challenges. Orientation can play a vital role in this process. It helps to make the new employee comfortable with the rules, system, work role, and organizational culture. Orientation programs concentrate on how, what and ways employees perform their duties. (Rohan & Madhumita, 2012). It is a learning tool meant for the employees. Solid and effective orientation programmes help the employees to learn their work roles better, which ultimately results in the quality of work produced. New employee orientation programmes can do two positive things: increase employee satisfaction and improve employee retention (Marcela, 2021). Reputed organizations all over the world organize orientations for their employees in a properly planned manner as the need to train, retrain, develop, and redevelop employees is straightforward and cannot be overemphasized (Karen, 2019)to provide training and develop employees new skills or updates on existing skills to enhance productivity in order to manage and run the organization effectively; whether large or small, competent personnel could be necessary. Only some employees have the requisite skills, knowledge, abilities and competence. Such skills include critical thinking and problem solving, teamwork and collaboration, professionalism and strong work ethic, oral and written communication skills, leadership skills, flexibility, adaptability, and adaptability to change.

Exhibit a range of intellectual abilities: inquisitive, innovative, logical, analytical, critical, creative, and able to think laterally and conceptualize issues rapidly. Based on this, employees require extensive training to acquire the necessary skills, knowledge, abilities, and competencies to contribute substantially to the organization's growth. Many types of training exist, such as job skill training, supervisory training, orientation, onboarding, technical skills, soft skills, product or services, compliance, franchise, management, leadership and development.

According to the Oxford Dictionary, productivity is the efficiency of producing things. Employees' productivity, however, is the measure of output per unit of input economically. Being productive in the workplace is an integral part of the business in the organization. Employees should produce and deliver quality outputs at the end of every working hour. Holland found six basic types of orientation: realistic orientation, investigative orientation, social orientation, conventional orientation, job specific orientation, and artistic orientation. Kulkarni (2013) posits that one of the reasons why organizational productivity has attracted research attention is that organizations depend on effective and efficient staff to create and maintain competitive advantage and achieve superior performance asemployee orientation programmes have the power to do two positive things: increase employee's satisfaction and improve retention as well. Most organizations cut short their orientation expenses by hiring ad-hoc, chaotic or haphazardly. In contrast, other organizations set about identifying their actual needs and then organizing and designing programmes rationally to address their employee needs. Ultimately, it could result in the quality and quantity of their work productivity (Senge, 2016).

Organizations strive to achieve their respective goals and purposes since this serves as a yardstick or standard for assessing their success or failure. Hence, those problems they face can be avoided through development techniques and programmes for managers, supervisors and other employees. Technology changes pose a lot of problems in the banking industry, and most employees are not conversant with the trends in the application of some machines, infrastructure and facilities, which might pose significant challenges in the job process.

The Nigerian economy's hardship or recession may pose many problems to both employees and employers in FCMB PLC. A significant issue that has continued to confront this bank institution, as observed by the researcher in FCMB PLC, is the lack of adequate planned orientation training for employees. Other factors include the need for in-depth knowledge of the organizational vision, mission, values and structure. Even when orientation is provided, it is overloaded with too many details and irrelevant introductions, which makes its process ineffective. All of these factors led to imagine the work pace and productivity, as new employees are being influenced or affected by these factors as mentioned above; others include violating company policy or corporate integrity, sexual harassment, discrimination, stealing, breaking the dress code and latenessto work, rumours to mention a few. All of these currently exist within the employees and causing discomfort and distraction in the area of study and have created the need to empirically evaluate if orientationis helping to equip employees to enhance productivity, which is imperative for their viability and survival of the organization, thus necessitating the study: effect of social orientation on employees' productivity, and conventional orientation on employee training at the First City Moment Bank PLC in Abia State, Nigeria.

METHODOLOGY

The researcher adopted a descriptive survey method carried out ex post facto. The population of this study consisted of all the employees of First City Monument Bank, PLC branches in Umuahia and Aba of Abia State. Based on the available reports,First City Monument Bank PLC has 2 branches in Umuahia comprising 34 at Akanu Ibiam Road and 29 staff at Library Avenue, making a total of sixty-three (63) employees, while Aba branches have 3 branches comprising 42 at Asa Road, 47 at Brass and 44 at Faulks road making a total of one hundred and thirty-three (133) employees according to the personnel manager of the FCMB of both core and none core. Thus one hundred a ninety-six (196) employees are the population of the study. The sample for the study was 196 staff of FCMB LC in the Umuahia and Aba branches. The sampling technique adopted was the purposive sampling technique. The primary instrument used was a well-constructed question titled "Effects of Orientation on Employees Productivity" (EOEPQ).The instrument used in generating relevant data for this research work is rated in four-point Likert, which are Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD). The ratings from the targeted respondents are specified as follows: SA = 4, AG = 3, DA = 2, SD = 1.The research instrument was validated by three experts in the Department of Human Resources Management in the College of Management Sciences of Michael Okpara University of Agriculture, Umudike. The reliability of the coefficient of the instrument was done using the Test-retest method. The data generated from these two administrations were correlated using the Pearson Product Moment correlation coefficient (r), which obtained the value of 0.83. Descriptive statistics and OLS regression were used to analyze the data collected.

RESULTS AND DICUSSIONS

Research Question 1

How does Job-specific orientation affect employees' career planning in First City Monument Bank PLC, Umuahia and Aba in Abia State?

Table 1: Coded Responses on Effects of Job-Specific Orientation on Employee'sCareer Planning in First City Monument Bank PLC, Umuahia and Aba in Abia State.

Job-specific orientation	SD 1	D 2	UD 3	A 5	SA 5	Mean	Std D	Remark
Job-specific orientation helps employees feel more relaxed and confident, resulting in fewer on-the-job mistakes and building high job potentials and self-abilities.	2	2	1	174	4	3.96	0.41	Accepted
Job-specific orientation makes employers feel closer to employees and more encouraged to collaborate for career plan interest needs.	0	36	11	15	18	3.08	0.82	Accepted
Job-specific orientation provides a clear understanding of standards and role responsibilities for career planning.	60	113	4	0	6	3.36	0.98	Accepted
Through Job-specific orientation, employees can better follow the work rules at FCMB.	18	25	39	98	3	3.23	1.04	Accepted
Job-specific orientation helps employees complete their tasks more clearly by receiving detailed information regarding policies, standards and responsibilities.	9	3	92	3	76	3.73	1.17	Accepted
Job-specific orientation increases job enrichment by providing employees with a clear and detailed job orientation process that can increase their confidence in their skills and abilities.	5	60	30	60	28	3.25	1.15	Accepted
Job-specific orientation contributes to quality risk that meets organizational goals and enhances career plans.	15	69	27	45	27	3.00	1.24	Accepted
My manager tells me what is happening in the organization by giving me specific job rotations at the end of a particular work, and this helps in the growth of all our banking services at First City Monument Bank PLC	23	64	18	10	68	3.20	1.54	Accepted
At First City Monument Bank PLC, Umuahia, I am given an opportunity to solve problems connected with my work directly through orientation from my superior and this has enriched my career content, potentials, opportunities and options at FCMB.	49	95	4	0	35	2.33	1.38	**Rejected**
I was told how First City Monument Bank PLC is performing regularly and critical areas for improvement and job enrichment, and this has impacted more of my day-to-day activities in the bank	18	25	39	98	3	3.23	1.04	Accepted
Clustered mean for decision rule:-						**3.24**	**1.08**	**Accepted**

Source: Researchers' Field Survey, 2023.

From the result, ten questions were designed in the questionnaire to ascertain the effects of job-specific orientation on employee career planning in First City Monument Bank PLC, Umuahia and Aba in Abia State. From the result, nine (9) of the variables in the table were accepted by the mean range used for the decision, which is 3.0 and above. This result shows that the mean responses for items 1, 2, 3, 4, 5, 6, 7, 8 and 10 surpassed the criterion mean (3.96, 3.08, 3.36, 3.23, 3.73, 3.25, 3.0, 3.20 and 3.23 ≥ 3.0).

Research Question 2

What are the effects of social orientation on employee productivity at the FCMB PLC, Umuahia and Aba in Abia State?

Table 2: Coded Responses on Effects of Social Orientation on Employee's Productivity at FCMB PLC, Umuahia and Aba in Abia State.

Social Orientation	SD 1	D 2	UD 3	A 5	SA 6	Mean	Std. D	Remark
Social orientation through close friends at FCMB encourages employee confidence and helps the new employee adapt faster to the Jobs.	67	15	38	4	59	2.85	1.69	**Rejected**
Contributes to a more effective, productive workforce; improves employee retention; and promotes communication between the supervisor and the new employee, unlike other orientation types	9	47	69	36	22	3.08	1.06	Accepted
Social orientation enables the new employee to become familiar with the organizational structure.	15	69	27	45	27	3.00	1.24	Accepted
One aspect of socialization is orientation training, which promotes communication between people and goal clarification.	12	53	45	36	37	3.18	1.24	Accepted
Social orientation makes training more organizationally flexible, giving new hires a foundational understanding of the company and their position.	9	51	38	9	76	3.50	1.39	Accepted
Expectations from the company and the employees are intertwined through social orientation due to the employees' adequate orientation, which enables them to perform greatly.	46	90	4	0	43	2.48	1.47	**Rejected**
Taking skill enhancement or employee development activities from my related who work with FCMB has helped me to perform well in my duties	13	18	51	98	3	3.33	0.94	Accepted
Goals and job expectations of FCMB through family, groups, and neighbourhoods working with me have helped me to understand what is expected of me and perform my duties well	76	16	28	4	59	2.75	1.74	**Rejected**
My mentor has helped me to adjust to the working environment	12	62	24	58	27	3.14	1.22	Accepted
Social orientation through my family peer groups who work at the bank has helped me to develop my learning	12	62	24	58	27	3.14	1.22	Accepted
Clustered mean for decision rule:-						**3.05**	**1.32**	**Accepted**

Source: Researchers' Field Survey, 2023.

Table 2 revealed that ten questions were designed in the questionnaire to ascertain the effects of social orientation on employee productivity at the FCMB PLC, Umuahia and Aba in Abia State. From the result, seven (7) of the items in the table were accepted by the mean range used for the decision, which is 3.0 and above. From the result, the mean responses for items 12, 13, 14, 15, 17, 19 and 20 surpassed the criterion mean (3.0).

Research Question 3.

What are the effects of conventional orientation on employee training at FCMB PLC, Umuahia and Aba in Abia State?

Table 3: Coded Responses on Effects of Conventional Orientation on Employees' Training at FCMB PLC, Umuahia and Aba in Abia State.

Conventional Orientation	SD 1	D 2	UD 3	A 5	SA 6	Mean	Std	Remark
Conventional orientation in internal and external training will help employees learn essential skills needed in life and on the job to increase understanding.	4	15	2	14	148	4.568	1.0134	Accepted
Conventional orientation applied in training helps the employees' growth and personal development to perform well in the Job and enhance performance.	0	18	16	149	0	3.716	.6343	Accepted
Conventional orientation in training and seminars helps employees acquire new skills for the external environment and get more active in Job with new ideas to increase productivity	1	40	40	102	0	3.328	.8331	Accepted
Conventional orientation helps employees communicate and behave well with others.	1	60	83	39	0	2.874	.7417	**Rejected**
Conventional orientation helps employees understand the value of structured time and how to manage it.	1	26	68	88	0	3.328	.7350	Accepted
Conventional orientation will help employees become disciples as employees need to follow specific rules and regulations.	1	34	60	85	3	3.301	.8068	Accepted
Conventional methods through the handbook have helped me understand employee workplace policies and procedures.	1	50	7	125	0	3.399	.9075	Accepted
Conventional orientation through paperwork has helped me understand normal and accepted workplace ways.	1	41	6	135	0	3.503	.8573	Accepted
Conventional orientation through reviewing paperwork at FCMB has helped me to understand employee workplace procedures	1	23	107	52	0	3.148	.6420	Accepted
Conventional application has enabled the reorientation of interactive and traditional methods of learning, which paved the way to perform well in my duties	1	50	77	55	0	3.016	.7737	Accepted
Clustered mean for decision rule:-						**3.42**	**0.79**	**Accepted**

Source: Researchers' Field Survey, 2023.

From the result shown in Table 3 above, nine (9) of the items in the table were accepted by the mean range used for decision, which is 3.0 and above.

Hypothesis 1

Job-specific orientation has no significant effects on employee career planning in First City Monument Bank PLC, Umuahia and Aba. The hypothesis was tested using OLS regression.

Table 4. OLS estimate for Test of hypothesis one
Dependent Variable: Employee's career planning
Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Job-specific	0.062750	0.028993	2.164319	0.0317
C	4.164742	0.098495	42.28398	0.0000

R-squared	0. 522702	Mean dependent var	3.961749
Adjusted R-squared	0.419842	SD dependent var	0.410924
SE of regression	0.406827	Akaike info criterion	1.050010
Sum squared resid	29.95695	Schwarz criterion	1.085087
Log-likelihood	-94.07595	Hannan-Quinn criter.	1.064229
F-statistic	4.684277	Durbin-Watson stat	1.794171
Prob(F-statistic)	0.031750		

From the regression analysis above, the value of the R^2 0.5227 suggests 52.27% of the changes in Employee career planning in First City Monument Bank PLC, Umuahia and Aba are caused by the independent variables (Job-specific orientation**)**. The result shows that the coefficient of Job-specific orientation was statistically significant in explaining the dependent variable. The intercept β_0 (4.164742) shows the value of Employee productivity in First City Monument Bank PLC, Umuahia and Aba when the values of the independent variable are indeterminate or when they are zero, this means that when the independent variable (Job-specific orientation) is 4.164742.

Hypothesis 2

Social orientation has no significant effects on employee productivity at the First City Monument Bank PLC, in Umuahia and Aba. The hypothesis was tested using OLS regression.

Table 5: OLS estimate for Test of hypothesis two
Dependent Variable: Employee's productivity
Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Social	0.050158	0.017699	2.834002	0.0051
C	4.104822	0.058627	70.01621	0.0000

R-squared	0.624808	Mean dependent var	3.961749
Adjusted R-squared	0.571908	SD dependent var	0.410924
SE of regression	0.403209	Akaike info criterion	1.032144
Sum squared resid	29.42649	Schwarz criterion	1.067220
Log-likelihood	-92.44119	Hannan-Quinn criter.	1.046362
F-statistic	8.031568	Durbin-Watson stat	1. 793205
Prob(F-statistic)	0.005119		

Ordinary Least Square was used to test hypothesis two from the regression analysis above; the value of the R^2 was0.625, which suggests that 42.5% of the total variation in Employee productivity was accounted for by social orientation. The result shows that the coefficient of social orientation was statistically significant in explaining the dependent variable. The intercept β_0 (4.104822) shows the value of effective administration when the independent variable's values are indeterminate or zero; this means that when the independent variable (social orientation) is 4.104822.

Hypothesis 3

Conventional orientation does not significantly affect employee training at First City Monument Bank PLC in Umuahia and Aba. The hypothesis was tested using OLS regression.

Table 6: OLS results for the test of hypothesis three

Dependent Variable: Employee's training
Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Conventional	0.050669	0.028477	1.779275	0.0769
C	4.117909	0.092816	44.36630	0.0000

R-squared	0.517190	Mean dependent var	3.961749
Adjusted R-squared	0.411760	SD dependent var	0.410924
SE of regression	0.408501	Akaike info criterion	1.058222
Sum squared resid	30.20395	Schwarz criterion	1.093298
Log-likelihood	-94.82728	Hannan-Quinn criter.	1.072440
F-statistic	3.165820	Durbin-Watson stat	1.859393
Prob(F-statistic)	0.076873		

From the regression analysis above, the value of the R^2 was 0.517; this suggests 51.7% of the changes in Employee training in First City Monument Bank PLC, Umuahia and Aba are caused by the independent variables (conventional orientation**)**. The result shows that the coefficient of conventional was statistically significant in explaining the dependent variable.

Discussions of Findings

Based on results, the first hypothesis tested indicates that the co-efficient of Job-specific orientation was significant at 5% and positively related to Employee's career planning in First City Monument Bank PLC, Umuahia and Aba; this implies that an increase in Job-specific orientationwill increase the Employee's career planning in First City Monument Bank PLC, Umuahia and Aba. Also, a unit increase in employee involvement will lead to a 0.062750 increase in Employee productivity in First City Monument Bank PLC, Umuahia and Aba. Hence, the null hypothesis was rejected since sig ($p = 0.000 < 0.05$) is less than the 0.05 alpha. Also, the clustered mean was 3.24, which was accepted and implies that Job-specific orientation affects employees' career planning in First City Monument Bank PLC, Umuahia and Aba in Abia State. This finding aligns with Pollabi (2017), Akdere and Steven (2018), and Mohammad and Hassan (2014).

The results show that social orientation affects employee productivity at the FCMB PLC, Umuahia and Aba in Abia State. The null hypothesis was rejected since sig ($p = 0.000 < 0.01$) is less than the 0.01 alpha. Also, the clustered mean was 3.05, which was accepted; this implies that social orientation affects employee productivity at the FCMB PLC, Umuahia and Aba in Abia State. This confirms apriority expectation because a social System exists between any two or more people who have common purposes or orientations and interact governments are regions within a limited scope or area, and Pollabi (2017) noted that social orientation is the sum of the orientation toward the legal, the ethical and the discretion any responsibility of the firm. This aligns with previous research by Watkins and Marsick (2017),Githinji (2014), Muhammad (2013) and Hina (2014), who all demonstrate that social Orientation systems have significant effects on their Employee's productivity.

Furthermore, the results of the analysis showed that conventional orientationhas a significant effect on Employee training in First City Monument Bank PLC, Umuahia and Aba, with a clustered mean of 3.42, which was accepted; the implication is that conventional orientation has effects on employee's training at FCMB PLC, Umuahia and Aba in Abia State, this is so because the conventional approach refers to the traditional way of teaching wherein most of the time lecture method is used. This method of learning is textbook-centred; the teacher dominates exam-oriented. The emphasis here is on remembering and reproducing facts, principles and learning theories. Students and teachers use this method at present. Thus, this type favours careers that involve structured, rule-regulated activities and careers. It is expected that the employee subordinates his or her personal needs to those of the organization, which also affects the Employee's productivity, as noted byKearsley (2010) and Okoye & Raymond (2013).

CONCLUSION

Based on the significant findings, the study concluded that a high relationship between orientation and employee productivity existed concerning First City Monument Bank in Abia State. Ultimately, job-specific, social and conventional orientation results in the quality of their work productivity as new employee orientation programmes have the power to do two positive things: increase employee satisfaction and productivity that tends to ensure employees' outputs such as acquiring new skills, mastering new situations, improving one's competence, recognition, adapts faster to the job, improve retention, promotes communication, build confidence, grow faster and development to mention a few. Based on the findings, the study recommends that since it has been found that Job-specific orientation has significant effects on Employee productivity in First City Monument Bank PLC, Umuahia and Aba. Banks should create a more enabling environment to motivate the employees to enhance their service delivery in line with the findings of hypothesis one, which suggests a significant relationship between Job-specific orientation and Employee's productivity in First City Monument Bank PLC, Umuahia and Aba.

First City Monument Bank PLC, Umuahia and Aba management should provide effective and steady organizational support in the form of orientation for their employees (through training and development as well as seminars and workshops, both at home and abroad) in order to avoid challenges arising from their inability to render superior service or inconsistency in service delivery.

Properly planned orientation should be given to the employees during recruitment to ensure full compliance in the organization.

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HUMAN CAPITAL DEVELOPMENT: INVESTIGATING THE EFFCT FOR IMPROVING AND SUSTAINING THE PERFORMANCE OF SMALL SCALE ENTERPRISES IN THE SOUTHEAST, NIGERIA.

Chukwuka Ekene U., Anikwe, Sunday O., Onuba, Chinwe and Okpo, Sylvia C.
Department of Industrial Relations and Personnel Management, Michael Okpara University of Agriculture, Umudike.
Corresponding Email: chukwuka.ekene@mouau.edu.ng

ABSTRACT
The success of every organization, be it a private or public, is determined by the amount of resources channeled to the designing of programs and policies for the development of their human capital. Human capital is plays a vital role in the organization which is manifested in the transformation of material resources into finished goods and services, which in the long run improves efficiency and effectiveness. This study therefore examines the effect of human capital development on the performance of small scale enterprises in the Southeast, Nigeria. The survey research design adopted for the study aided the use of One Hundred and Thirty Four (134) returned copies of questionnaire that was used for the data analyses. The study used Chi-square inferential statistics to test the hypotheses for the study. The Chi-square result indicated there is a significant relationship between human capital development and performance of small scale enterprises in the Southeast, Nigeria. The study in conclusion pointed out the need for management of organizations to invest in human capital development so as to improve their performance. The study, thus, recommended among others that both private and public organizations should design policies and programs geared towards the improvement and development of the employee skills, knowledge, and experience. In other words, human capital development should be regarded as a sacrosanct activity that all employees must be involved if they desire to improve the skills, knowledge and abilities of the current as well as potential workers as well as the growth of the organization.
Keywords: Human, Human capital, Human Capital Development, Training, Development, Organizational Performance and Small Scale Enterprises.

INTRODUCTION

Human capital development is essential for sustainability and growth of an organization. It is thus us, being realized now that the forces that give life to an organization are the human energy and creativity operating therein (Onodugo, 2014). As a result, no matter how valuable and sophisticated capital and technology may be, it's relevance to the organization's goal when managed and operated by underdeveloped human resources. They do not only lack capacity but also the motivation to use other resources efficiently towards the organizational ends (Ugbaja, 2012). In the productivity function of an organization (Schultz, 1961; Becker, 1962), Human capital remains an important factor and recently, being identified as a factor influencing competitiveness among firms (Bartel, 1989; Senker and Brady, 1989; Howell & Wolff, 1991; Prais, 1995).

The realization of the value of human resources has led to the proposal by experts that they should be classified as "assets", hence the term "human capital" (Anderson, 2012). To get the best out of the human resources in an organization, there must be substantial and meaningful investment on them. Organizational objectives such as profit maximization, large market share, and fulfilling social responsibility cannot be achieved without an efficient work-force. In some organizations, only individuals who have acquired skills on specific jobs are employed. But in others, individuals are employed to be developed on- the -job as required by the organization. In this case, it is believed that the individual, through training and development programmes, will acquire the skill and knowledge required for effective productivity of the job (Nwatu, 2006). However, human capital development must be based on the need rather than meeting the requirements of the organization. Such requirements must be accurately defined and the development programme should be organized to exploit the potentials of the employee or to correct the deficiencies in the level of their productivity (Ugwunna, 2007).

Today, the business environment is very dynamic and undergoes rapid changes as a result of technological innovation, increased awareness and changing demand of customers and the environment generally. Business organizations, especially the banking institutions, operate in a complex and competitive market characterized by innovative changes. As a result, human capital inthese banks ought to be kept abreast

with the continuous changes in the banking environment (Isichei, 2006). Thus includes internal and external banking environments. In order to be competitive and keep afloat, human capital development should be on a continuous basis. In other words, bank employees should be trained and re-trained continuously and adequately motivated in order to stimulate high productivity as this is one sure way to make the business profitable, growing and self sustaining (Ajunwa, 2005). As has been observed and stressed in the financial sector, the ever improving information and communication technology and demands of stakeholders have engendered keen competition, thus giving rise to the need for well trained and retrained human capital. With the continuous improvement in human capital in response to the changing business environment, over time this will lead to growth and sustainability. Thus, the critical success factor of business organization is to have a pro-active human capital which can anticipate the future and adjust in advance to ensure continuous high productivity which would ultimately lead to growth and sustainability. The onus therefore lies with management to put in place an appropriate and efficient mechanism for human capital development (Osemene, 2007).

Suffice to say that the effectiveness of the practice of human capital development seems to vary across contingencies. The first contingency is environmental turbulence because the ability to exploit external knowledge is more critical when a firm tries to engender its competence to address environmental rapid change (Cohen and Levinthal, 2013). The second contingency is the knowledge-sharing climate within a firm, which may influence the extent with which the knowledge held by individuals can be passed to others for its value to be appropriated and leveraged (Cabrera and Cabrera, 2005). In order to ensure that SMEs in Nigeria grow, develop, and remain globally competitive, they must train and develop their human capital in line with changing trends in technology and market economics. It seems a common practice among SMEs in Nigeria, to see training as a one-time activity, necessary only for new employees. This is a mistake given that on-the-job training, sponsorship to seminars and workshops, as well as participation in trade fairs and exhibitions for serving employees helps them adjust to rapidly changing job requirements and market conditions (Industrial Training Fund, 2006).

Thus, Thaker (2008) summarized the above benefits into increased productivity, reduced employee turnover, increased efficiency resulting in financial gains, and decreased need for supervision. Therefore, we sought to fill this research gap by examining empirically the effects of human capital development on the performance of small scale enterprises in the southeast. Human capital development face several problems that inhibit their effectiveness for organizational development and sustainability. Firstly, the inability of Human Resource Managers to properly identify and determine training and development needs is a serious human capital development problem as it not only leads to under development of employees but also under-selection of employees for training. Human Capital Management is a key business initiative in the present globalized market place. Without insight into workforce and talent needs, organizational performance suffers. To align with critical and emerging business goals and metrics, the small scale enterprises have to ensure that human resource has a strong understanding of the organization's emerging and core business issues and key metrics and productivity indicators to determine what human resource related data will be most useful in aligning and driving business productivity (Maran, 2014). The organization's success hence relies heavily on human capital management drivers, which includes: leadership practices, employee engagement, knowledge accessibility, workforce optimization and learning capacity. Therefore this study examined the effect of human capital development as an instrument for improving and sustaining the performance of small scale enterprises in the southeast, Nigeria with emphasis to Abia State small scale enterprises where we beamed our search light.

LITERATURE REVIEW

Concept of SME

A global definition of SMEs, using the size and scale of an operation, has not been possible, but within the fixed co-ordinates of national boundaries, it might be relatively easier. However, the definition, which represents the general view of what the SMEs stand for, is one which emphasizes those characteristics that might be expected to make their performance and other problems different from those of large enterprises. These features of the SMEs vary among countries and industrial groups. The difference, according to Ogunleye (2004), could be ascribed to the different capital requirements of each business, while those among countries could arise as a result of differences in the stages of industrial and economic development of countries. What might, therefore, be defined as SME in a developed country can be regarded as a large scale enterprise in a developing country, using such parameters as fixed investment and employment of the labor force. Against this background, various classifications have been put forward by different institutions

at different times as to what constitute as SMEs. However, for purposes of this paper, we adopted what was put forward at the 13th Council meeting of National Council on Industry held in July, 2001 and as reported by Udechukwu (2003), in which industries were classified into three groups that were based on size, which were: ¾ Micro/Cottage Industry:

An industry with a labor size of no more than 10 workers, or a total cost of no more than N1.5M, including working capital, but excluding the cost of land. ¾ Small Scale Industry: An industry with a labor size of 11 – 100 workers or a total cost of not more than N50 million, including working capital, but excluding the cost of land. ¾ Medium- Scale Industry: The labor size is between 101 – 300 workers or a total cost of no more than N50 million, but no less than N200 million, including working capital, but excluding the cost of land. 51 We can therefore say that SMEs are those industries with a personalized management structure and a workforce no more than 300 workers, having fixed asset investment and working capital below N200 million, excluding the cost of land. State of SME in Nigeria The performance of many SMEs operating in Nigeria in the most recent time has been hampered due to an inadequate capacity to take advantage of business opportunities. According to Akinnawo (2003), "SMEs have been estimated to represent up to 90 percent of all enterprises in Nigeria, employing no less than 70 percent of our local labor force, with a significant, but not easily quantifiable contribution to the Gross Domestic Product (GDP)". However, a number of factors, among which include poor remunerations and inadequate opportunity for skills acquisition on new techniques, seems to be highly responsible for this (Centre for Management Development CMD, 2008).

The performance level of most of these SMEs has been most unsatisfactory, as the problems of delay in delivery of services and high cost of service delivery has become a norm rather than an exception. In some other cases where the cost and time are within acceptable limits, the issue of customer satisfaction has often not been met simply due to the delivery of sub-standard outputs (Nnanna, 2004). All the above issues cumulate into cases of inability to take advantage of profitable opportunities in the market place. The possible reason for this may include that the majority of the employees may not have received adequate training and exposure to perform the functions they are assigned to. These problems have led to situations of low productivity on the part of the employees and poor performance on the part of the SMEs that employed them. However, in order to realize the objective of profit maximization by SMEs, the personnel involved in its operations must be adequately trained to enable them to be alert to their responsibilities, more importantly given the over-bearing effects of competition from the very large firms and from SMEs operating in Asia, made possible by globalization. The need for training of employees of SMEs cannot be over emphasized as technological changes have made it imperative that employees are trained and retrained on a continuous basis.

Human Capital Development

Human Capital Development The term 'human capital' is defined by Bontis (2014) as a combination of the following four factors: genetic inheritance; education; experience; and attitudes about life and business. Hines, (2000) defines it as the combined knowledge, skills, innovativeness and ability of the company's individual employees to meet the task at hand. It obviously includes intangibilities such as the company values, culture and philosophy. A logical deduction is that when an enterprise educates its employees, it increases its human capital. This does not mean that the company will have more control over its assets. Edvinsson, (2016) states in a free society that enterprise cannot own, only rent, its human capital. Seviby (2008) argues that people should be seen as the "only true agents in business; all tangible physical products, assets as well as the intangible relations, are results of human action and depend ultimately on people for their continued existence. Ahangar (2011) sees human capital is recognized as the largest and the most important intangible asset in an organization which ultimately provides the goods and/or services that customers require or the solutions to their problems". It includes the collective knowledge, competency, experience, skills and talents of people within an organization. It also includes an organization's creative capacity and its ability to be innovative. Although investment in human capital is growing, there is still no standard measure of its effectiveness in companies' balance sheets. Structural capital is the supportive infrastructure for human capital. It is the capital which remains in the factory or office when the employees leave at the end of the day. It includes organizational ability, processes, data and patents. Unlike human capital, it is company's' property and can be traded, reproduced and shared by, and within, the organization (Ahangar, 2011). Relational capital is a company's relationship with its customers and with its network of suppliers, strategic partners and shareholders. These elements of intellectual capital (IC) are summarized in the definition of CIMA (2001) IC is the possession of knowledge and experience, professional knowledge and skill, good relationships, and technological capacities, which when applied will give organizations competitive advantage.

Human Capital consists of the skills, competencies and abilities of individual and group (Stewart, 1997). Boujelbene and Affes (2013) interpret human capital as "employee values creating potential depicted in the knowledge competencies, skills, experiences, abilities and talent of firms employees and managers. Human capital captures knowledge, professional skill, experience and innovativeness of employees within an organization. According to Rastogi (2000) as cited by stiles and Klvisaechana (2008) the concept and perspective of human capital stems from the fact that "there is no substitute for knowledge and learning, creativity and innovation, competences and capabilities and that they need to be relentless pursued and focused on the firms' environmental context and competitive logic. Nielson *et al.* (2006) submit that human resources capital is the core of IC components and they include skilled staff, knowledge and management philosophy the company's' productivity has been affected. Wikipedia defines human capital as a way of defining and categorizing peoples' skills and abilities as used in employment and as they otherwise contribute to the economy.

Schmidt (2004) defines human capital as a form of intangible assets that creates future economic value, which include the competencies of front-line employees and the organizational capabilities. Human capital according to Mustapha, (2005) consists of knowledge, skills, dexterity and personality attributes that enable individual to perform a particular task in an attempt to produce goods and services that have economic value to the people. For effective and efficient human capital development organizations must place concerted efforts in training its employee's to take abreast of its changing business environment for improved job productivity in organization (Mustapha, 2005). The trend in technology and market economies however, emphasizes the need for organization to find ways of developing and mobilizing the intelligence, knowledge and creative potential of human capitals in an attempt to meet the demands of the environment. John, (2000) sees human capital as a compendium of knowledge, abilities, and skill inherent in individual that emanates from natural endowment, formal education and training. Udu (2014) sees human capital development as the education, skill levels and problem-solving abilities individuals possessed that make them to be productive workers in the global economy. Human capital development according to Stone (2002) plays an indispensable role on employee job productivity as it provides an institutional framework for skill acquisition necessary for operational efficiency. Therefore, the extent to which members of organization contribute in resource allocation, mobilization, and utilization to large extent depends on human capital development.

Hill (2001) contends that human capital is increasingly an indispensable key factor in enhancing employee job productivity in order to sustain competitive advantage giving the dynamic nature of business environment. Productivity According to oxford dictionary Productivity is the rate at which a worker, a company or a country produces goods, and the amount produced, compared with how much time, work and money is needed to produce them. Productivity has two major components, technological change and manpower utilization. As technological change requires huge capital investment, organizations look for better manpower utilization to achieve increased productivity. With better human relations productivity can be increased. And there is no simple formula of getting the things done other than good human relations. Sometimes this can be stated that better relations can make an environment of productivity and that productivity if fairly and promptly rewarded, it makes very good human relations, which can work for a long time in the growth and success of the organization. Today, this is the time when there are two things, which are very common in businesses, first is rapid growth and expansion and second is stiff competition both require efficient and highly productive human resources. To expand the business one must have all the things concerned with human beings that vision, zeal to learn and do, result oriented approach and habit of continuous improvement. There is no line where we can say that the best of our productivity has come. The best is always still to come and employees and their management always work for the same. The Productivity is the driving force behind an organization's growth and profitability. Productivity is the relationship between output of goods and services of workers of the organization and input of resources, human and non-human, used in the production process. In other words, productivity is the ratio of output to input. The higher the numerical value of this ratio, the greater the productivity (Onah, 2010). Productivity has been defined as the measure of how well resources are brought together in organization and utilization for accomplishment of a set result. It is reaching the highest level of productivity with the least expenditure of resources (Mali, 1978). According to Onah (2010), productivity is the relationship between output of goods and services and input of resources, human and non-human, used in the production process. In order words, productivity is the ratio of output to input. The higher the numerical value of this ratio, the greater the productivity. Thus, productivity can be applied at any level, whether for individuals, for work unit, for the organization. Productivity is a measurement or calculation between input and outputs. Inputs are the amount of resources such as human resource, money, time,

physical, technological and effort spent working in the organization, while output are the result. If the inputs are equivalent to the outputs, the worker is considered productive. When the employees are productive, they accomplish more in a given amount of time. In turn, efficiency saves their company money in time and labour.

When employees are unproductive, they take longer time to complete projects, which cost employee's more money due to the time lost (Ikeanyibe, 2009). The importance of higher productivity of the employees in public enterprise cannot be overemphasized, which include the following; Higher incomes and profit; Higher earnings; Increased supplies of both consumer and capital goods at lower costs and lower prices; Ultimate shorter hours of work and improvements in working and living conditions; Strengthening the general economic foundation of workers (Nwachukwu, 1988). The existence of any organization is anchored on productivity and its importance cannot be overemphasized. It is the wish of every organization to be productive because productivity forms the cardinal essence for which every organization exist. To attain or increase productivity has led many organizations into constant reshuffling practice. This is in line with Simon (1957) when he rightly noted that "the issue of productivity has been instrumental to most repositioning exercises that go on from time to time in many organizations". In fact productivity has often become the most central, contentious and analytical issues in all organizations be it public or private. Robert and Tybout (1997) opined that Productivity can be seen as the measure of the relationship between the quantity and quality of goods and services produced and the quantity of resources needed to produce them (that is, factors inputs as labour, capital and technology).

Mali (1978) in attempting to come to terms with issue of productivity brought in the idea of produce. In this regard, he sees productivity as "the measure of how well resources are brought together in the organizations and utilized for accomplishing of a set of results. It is reaching the highest level of productivity with the least expenditure or resources. Regarding the above definition, productivity entails an effective integration of resources, physical and human to yield higher output. However, increased productivity could result from reduction in the use of resources, reduction in cost use of better methods or improvement in factors of capabilities, particularly labour, put succinctly, productivity is measured by dividing value of output with the cost of input. It implies the attainment of predetermined goals or results with the list necessary expenditure of resources; hence productivity can be equated with efficiency of sources. Nwachukwu (2006) agrees that higher productivity as would be the wish of many organizations can be achieved through ensuring higher earnings for workers; ultimate shorter hours of work and improvements in working and living conditions and strengthening the general economic foundation of workers. Other factors that increase workers' productivity are job involvement, job satisfaction, motivation, organizational and individual commitment, training and development of workers, promotion, recognition etc. Hence, the absence of the above in any organization be it public or private sector results low productivity which is detrimental to workers' productivity.

Role of Training in Human Capital Development

Training is considered fundamentally important to human capital development. It could be described as the vehicle that takes organization to their destination within a stipulated time frame. The importance of human capital development to the survival of modern organizations cannot be overemphasized. For any organization to survive the competitive business world, it must train and retrain its human resources in consonance with its immediate and remote operational environment. Training of employees results in increased productivity in any organization. It helps SME employees attain self-fulfillment in personal goals as they work to achieve an organizational goal. Furthermore, it is pertinent to note that technological growth of any nation depends on the bulk of trained human resources available. John F. Kennedy, as reported by Gary (2001), once said, "Manpower is the basic resource, the indispensable means of correcting other resources to mankind's use and benefit. How well we train, develop, and employ the human skill is fundamental in deciding how we will accomplish as organizations. The manner in which we do this will profoundly depend on the kind of nation we have.'' According to Thaker (2008), "training is an organized procedure by which people learn knowledge and skills for a definite purpose". Tim and Brinkerhoff (2008) insist that human capital development represents the planned opportunity that is 52 provided for training, education directed and planned experiences, and guided growth. Zigon (2002) saw training as the overall process where by an individual's behavior is modified to conform to a pre-defined and specific pattern. Training is also a process or procedure through which skills, talents, and knowledge of employees are enhanced (Industrial Training Fund, 2006).

Human Capital Development and Firm Performance

Human capital draws attention mainly on two (2) components which are individuals and organizations. These concepts have further been described by that human capital has four basic attributes: flexibility and

adaptability, enhancement of individual, the development of organizational competencies and Individual employability. It demonstrates that these attributes in turn generates values to individual and organizational outcomes. There are various findings that incorporate human capital with advanced performance and sustainable competitive advantage and enhanced organizational retention .Hence, all this debates fundamentally emphasize on individual and organizational performance. From the individual level, pointed out that "the importance of human capital depends on the degree to which it subsidizes to the creation of a competitive advantage. From an economic point of view, transactions-costs designate that firm gains a competitive advantage when they own firm-particular resources that cannot be copied or rivaled. Thus, as the uniqueness of human capital increases, firm have inducements to invest resources into its management and the purpose to reduce risks and get the most out of productive potentials. Hence, individuals need to enhance their competency skills in order to be competitive in their organizations"

"The human capital theory has undergone a rapid development. Within its development, attention has been paid to training related aspects. This is much related to the individual perspective. Human capital investment is any activity which improves the quality (productivity) of the worker. Therefore, training is an important component of human capital investment. This refers to the knowledge and training required and undergone by a person that increases his or her capabilities in performing activities of economic values. In addition,] has noted that "human capital as a source not only to motivate workers and boost up their commitment but also to create expenditure in R & D and eventually pave a way for the generation of new knowledge for the economy and society in general. Also, for small businesses it is a valuable

Empirical Review

According to Udu and Ewans (2016), Human capital development and employee job productivity using double diamond plastic manufacturing firm, Aba, Nigeria as a case study. The study employed a correlation design in an attempt to determine the direction and magnitude of the relationship between the studied variables. Structured questionnaire drawn on 5 point scale rating was administered to a sample of one hundred and sixty five (165) respondents drawn from the population of the study. The data collected from the respondents were analyzed with Pearson's product moment correlation and pvalue. The results show a positive relationship between on-the job training and quality of employee job productivity. This was shown by a positive correlation coefficient and the result on the second objective shows a positive relationship between off the job training and worker efficiency. This also was shown by a positive correlation coefficient (r) of (0.84). The implication is that increased in human capital development enhances employee job productivity, which in turn, leads to increased organizational productivity. In the light of the findings, the study recommends that organizations should allocate considerable efforts, time, and resources to invest on human capital development for the acquisition of practical skills, and learning experience deep-rooted on the work for operational excellence.

Yaya (2016) investigated the effect of human capital development on job satisfaction of librarians in Nigerian public universities. A correlation survey research design was adopted. The study population consisted of 1,254 librarians in public university libraries in Nigeria, from which 923 were selected using simple random sampling. The research instrument used was a self-developed questionnaire. The study revealed a significant relationship between human capital development and job satisfaction of librarians in public university libraries in Nigeria. It concluded that contrary to general belief, job satisfaction and productivity levels of librarians in university libraries were high. It is recommended that university library management should continue to promote values such as improved employee recognition, good leadership style and improved human capital development programmes that would increase job satisfaction and productivity of its workforce. Danjuma and Akinpelu (2016) examined the impact of human capital efficiency on corporate productivity of industrial goods companies listed in the Nigerian Stock Exchange Market. For a period of 6 years (2009-2014,) the effect of human capital efficiency on productivity was examined by applying the human capital component of the value added intellectual coefficient (VAIC) methodology. Multiple Linear regression models were used for analyzing the relationship between the variables of interest; Employees' growth (EG), Earnings per Share (EPS), Return on Assets (ROA), Human Capital Efficiency (HCE), lagged Human Capital Efficiency and Size of the firms. The finding survived a number of robustness check and the result indicates that there is positive significant relationship between human capital efficiency on ROA and EPS, and an insignificant negative relationship between human capital efficiency on Size, lagged human capital efficiency and number of employee growth. This study contributes to the existing Human Capital theories by revealing the HCE of Industrial goods companies and its impact on Corporate Productivity.

Chijindu *et al.* (2016) examined the effect of human capital development programmes in optimizing employee productivity in Abia State. The research adopted survey research design, primary and secondary

data was used, and questionnaire and oral interview was used in eliciting information from the respondents. The Population of the study consist of three hundred and fifty seven (357) employees of the organization, using Taro Yemen formula the sample size was deduce to be one hundred and eight nine (189), and simple random sampling technique was used to select the respondents. Descriptive statistics and Logistic Regression analysis was used to analyze the data obtained with the aid of SPSS version 20. The analysis was based on one hundred and sixty five (165) questionnaire well filed and returned. The major findings revealed that human capital development programmes employed in Abia State House of Assembly includes: Training, Seminar, Workshop, and Skill Acquisition. With regards to the relationship between the human capital development programmes employed in Abia State House of Assembly and the productivity of their employees, Logistic Regression result revealed that: training, seminars, workshops and skill acquisition are the human capital development programmes that are significantly related to the productivity of employees. The researcher concluded that training, seminars, workshops, skill acquisition enhances employees productivity when effectively and efficiently implemented and sustained, and thus, recommends that government should live up to their responsibility by adequately funding Abia State House of Assembly to enable them sustain the human capital development programmes in the organisation. Udu, (2014) carried out a study on in-system human capital development in Nigerian Universities with focus on National Universities Commission (NUC) on Doctoral Degree. The study was design to explore the issues surrounding the weak human capital development in the Nigerian university system. The conventional content analysis method was employed in the treatment of information collected from the ten (10) universities in the South East, Nigeria because they share the same institutions, environmental and configurations with other universities in the country. The study found that Nigerian university system is made up of academic staff members who have divergent degrees in their numbers but dearth the pre-requisite capabilities, competencies and knowledge to effectively inculcate the right ideas and required skills to the students. The few who are actually academics are cumbered with work over load that they seldom have time to actively engage in incise research publishable in international journals. Mehmet *et al.* (2014) examined the relationships between organizational learning and organizational performance in Nigeria banking sector. A survey research method with statistical treatment was conducted in this study. To test the model, except demographic variables, a 21-items questionnaire was conducted using random sampling method to the employees of various banks in Nigeria. A total of 203 completed questionnaires were evaluated for analysis. The data analysis revealed that there is a positive relationship between organizational learning and organizational performance. The findings of the study indicated that, there is a relationship between organizational learning and organizational performance. According to demographic variables, bank managers have higher learning perception than other employees. The study offers practical suggestions of how management can improve organizational performance by improving the organizational learning of the organization. Survey was not all-inclusive to contain all potential bank employees in Nigeria. Paluku (2016) studied employees engagement has emerged as a potential factor for organizational performance. Many practitioners of human resource management have poorly understood measurement of employee motivation for activities and more precisely its commitment.

This study analyzes factors on employee engagement and performance from selected retailing business enterprises in Wobulenzi-Luweero City, Uganda. A questionnaire was administered to 120 selected respondents, using purposive sampling technique. Measurement was done with the use of descriptive and inferential statistic approaches to consider responses from respondents and make decision accordingly. The study focused on measuring the employee engagement in relation with the organizational performance focusing on non-financial factors. The findings show that the degree of retail employee engagement and the level of job satisfaction were very high in retailing enterprises in Wabulenzi-Luwero city. However, it was observed that in retailing organizations, employees were found it difficult to make equilibrium of work experience and house life with their employment. This study shows that despite the association between employee engagement and job satisfaction, there is no relationship between employee engagement and job assignment, which is an important key factor for organization performance. The results reveal that job assignment is critical for engaging employees to ensure organizations' longevity and profitability. Priyadarshni (2016) examined the impact of employee engagement on employee productivity and motivational level of employee in Retail sector. This sector providing more opportunities for job enhancement but retaining employee are one of the most challenging issues for the retail industry, because of high turnover and low performance. Understanding what drives employee engagement illuminates the path leaders can take to enhance employee retention in their organizations. The findings and recommendations of this study are for retail sector in general. It would help them to perform better and ready to take more responsibility, energetic and inspiring. Retaining the highly skilled workforce has

become a key concern for many organizations in good as well as bad times provided the importance of these human resources to company's success and survival. Thus employee engagement determines the association of person with the organization.

Theoretical Framework

This research is anchored on Human Capital Theory by Adam Smith (1776). The origin of human capital goes back to emergence of classical economics in (1776) and thereafter developed a scientific theory. The idea of investing in human capital was first developed by Adam Smith (1776), who argued in the Wealth of Nations that differences between the ways of working of individuals with different levels of education and training reflected differences in the returns necessary to defray the costs of acquiring those skills. Economists such as Elliot (1991) developed the theory of human capital. He is concerned with human capital in terms of the quality, not quantity, of the labour supply (Baron and Armstrong). After the manifestation of that concept as a theory, Schultz (1961) recognized the human capital as one of the important factors of national economic growth in the modern economy (Dae-bong, 2009). The theory argues that a person's formal education determines his or her earning power. Human capital theory holds that it is the key competences, skills, knowledge and abilities of the workforce that contributes to organizations competitive advantage. It focuses attention on resourcing, human resource development, and reward strategies and practices.

According to Human Capital Theory, education is an investment because it is believed that it could potentially bestow private and social benefits. Human capital theorists believe that education and earning power are correlated, which means, theoretically, that the more education one has, the more one can earn, and that the skills, knowledge and abilities that education provides can be transferred into the work in terms of productivity (Dae-bong, 2009). This theory emphasizes the value added that people contribute to an organization. It regards people as assets and stresses that investments by organizations in people will generate worthwhile returns. The theory suggests that investment in people results in economic benefits for individuals and society as a whole (Sweetland 1996). The investment in individual can be made in terms of education, health, nutrition, and any other development that results in long-term benefits. It is important to clarify that the investor in this particular case is an individual who decides whether to invest his or her time, money and other resources into some activity that will benefit his or her human capital. Many researchers have been conducted in the area of human capital however; there is still the existence of a wide gap between theory and practice. The shift towards value-addition based measurements of investment in intellectual capital has gradually begun to close the gap between theory and practice. This model meets the demand for giving employees the status of key resource by treating them as investment and not as cost; this because they invest their knowledge and skills which is valued by the market through the company's activities and reflected in the created value added. The model has received wide usage in the area of intellectual capital valuation especially with intellectual capital due to the inadequacies of the other valuation methods and measurement models. The model provides a standardized and consistent basis of measure that can be used for easily comparison both within sector, industry or internationally. It is also important to state that all the data used is based on audited information from financial reports, therefore results can be said to be objective and verifiable. Also, like other traditional measures of corporate productivity, it is easy and straightforward for both internal and external users of the financial statement.

METHODOLOGY

The researchers adopted the descriptive survey research design which will enables them to meet with the respondents to collect information from a representative sample of a population of two hundred and one (201) with a sample size of one hundred and thirty four (134) respondents from seven small scale industries (7) using Taro Yamane (1945) formula. The stratified and simple random sampling technique under the probability sampling method were employed since equal chance of being selected will be given to all staff which y cut across all categories of employees in these organizations. The hypotheses were tested using the chi-square.

The study generated data from the questionnaire distributed to the employees of the selected small scale enterprises and were presented and analyzed. A total of one hundred and thirty and one (134) copies of questionnaire were distributed to the employees of seven small scale enterprises. A total of one hundred and ten (110) copies were retrieved from the respondents, out of which one hundred and ten (110) copies were properly filled and found usable for the study. The 15 copies were not properly filled while the remaining 5 copies were misplaced by the respondents. This gives a response rate of 82.4 percent. Therefore, the analyses presented below were based on the one hundred and ten copies.

Test of Hypotheses

The hypotheses for the study which were stated in the null form were tested using Chi-sqaure in the table below:

Hypotheses One (1)

HO_1"There is no significant relationship between human capital development and the performance of small scale enterprises in the Abia State, Southeast, Nigeria"

Table 1: Table for Computation of Chi-Square

0	E	0-e	$(0-e)^2$	$\frac{(0-e)^2}{e}$
6	3.32	2.68	7.18	2.16
10	12.67	-2.67	7.12	1.06
5	7.27	-2.27	5.15	1.01
30	27.72	2.28	5.19	2.07
3	2.07	0.95	0.90	0.43
7	7.92	-0.92	0.84	1.07
1	1.45	-0.45	0.20	0.14
6	5.54	-0.46	0.21	1.04
1	1.87	-0.87	0.75	0.40
8	7.12	0.88	0.77	1.11

$$\text{Chi-square } (X^2) = \sum\frac{(0-e)^2}{e} = 10.49$$

Source: Field Work, 2023.

Decision

Reject H_o, if chi-square calculated valued is greater than chi-square table value, accept H_o if other wise

Conclusion

X^2 Calculated value is 10.49

X^2 table value (0.05, df) is 9.488

Therefore our Null hypothesis (Ho) is rejected because 10.49 is greater than 9.488.

The implication is that the alternative hypothesis (H_1) is upheld. This means that there is significance relationship there is no significant relationship between human capital development and the performance of small scale enterprises in the Abia State, Southeast, Nigeria"

Hypotheses Two (2)

HO_2"Training does not have any significant effect on the productivity of small scale enterprises in the Abia State, Southeast, Nigeria"

Table 2: Table for Computation of Chi-Square (x^2)

Source: Field Work, 2023.

0	E	0-e	$(0-e)^2$	$\frac{(0-e)^2}{E}$
4	4.57	-0.57	0.32	0.07
18	17.42	0.58	0.33	1.01
8	7.27	0.73	0.53	1.07
27	27.72	-0.72	0.51	1.01
2	1.03	0.97	0.94	1.91
3	3.96	-0.96	0.92	0.23
1	1.66	-0.66	0.43	2.25
7	6.33	0.67	0.44	1.06
1	1.45	-0.45	0.20	1.13
6	5.54	0.46	0.21	1.03

$$\text{Chi-square } (X^2) = \sum\frac{(0-e)^2}{e} = 10.77$$

Decision Rule

Reject $H_{o.,}$ if chi-square calculated is greater than chi-square table value, accept H_o if otherwise.

Conclusion

X^2 calculated value is 10.77

X^2 Tabulated value (0.05, 4df) is 9.488

Therefore our Null hypotheses ($H_{o.)}$ is rejected because 10.77 (X^2 calculated) is greater that 9.488 (X^2 tabulated). This means that Training has significant effect on the productivity of small scale enterprises in the Abia State, Southeast, Nigeria.

Discussions

Human capital development and performance of small scale have significant relationship. That is if management of organisations focus their resources in developing policies on the development of their human capital, the performances of both the staff and the orgainsation will definitely improve. Training has significant effect on the productivity of small scale enterprises in the Southeast. The Chi-square calculated figure of 10.77 is greater that 9.488 (X^2 tabulated). This means that Training has significant effect on the productivity of small scale enterprises in the Abia State, Southeast, Nigeria. The essence of training is to improve the skills and experience of employees which in the long run enhances productivity in the workplace. Since it has a significant effect on employee productivity, management of organisations should engage their staff on periodic training activities to enhance their skills, experience and knowledge in line with their stated mission, vision and objectives.

CONCLUSION AND RECOMMENDATIONS

As long as the transformation of material resources into finished goods and services are concerned, human capital development in terms of employees training, retraining and development in the organizations have come to stay with us. It has been established that effective human capital development may have a positive contribution to the organizational performance from the theoretical and literature point of view of the study. In view of this, the profit-making and non-for-the profit-making organization have in the recent time to classified employees' training, retraining and development as a critical strategic stand-point. Human capital development is crucial to the organizational survival, continuity and/or failure depending on the value placed on it by the concerned organisation. However, where little or no premium is placed on employees' training and development, it may lead to a serious continuity challenge. Several organizations who have achieved some steady growth in their operational performance over the time have affirmed that effective employees' training and development programme have helped in the pursuit of their overall goals. In view of the foregoing, this study raised the following conclusions: The study concluded that identifying training and development needs, designing and implementation of its outcomes in most appropriate ways will help to position the organization to have readily available well-trained talents for pursuing its present and future goals if the conceptual framework provided for the study strictly adhere to. In addition, the study also stressed that for training and development programmes to work effectively in an organization, the selection of employees for training, retraining and development programmes in the organization must be based on objectivity. As a result of the findings of this study, the following recommendations:

1. Employer should have compulsory training programmes for all employees in order to improve the knowledge and understanding of annual business strategy and objectives to improve organizational productivity.
2. The whole programs should be carefully and thoroughly designed. This includes making sure that the syllabus contains what is required of the employees to know, to have competent trainers, adequate and necessary training facilities and regularity of the programs.
3. Management a need to consider the staff and their job assignment to knowledge accessibility in other to improve organizational productivity through compulsory training programmes for all employees in order to improve the knowledge and understanding.
4. Organizational must devise clear and firmly established plans and programs to help and encourage employee to acquire organizational learning capacity and to increase knowledge acquisition and preventing the deterioration of the employees knowledge, some special programs must be designed to train them based on their field of expertise.
5. The Human resource managers should ensure that proper diagnosis, determination and assessment of human capital needs in the organization. This will guarantee that the right number and categories of staff are selected for the training and development programs.

6 There should be constant research on developments in the organizational environment that requires training and upgrading and improving the skills of employees. Thus will allow the right training and

development programs to be mapped out and implemented so as to keep the employees abreast with the developments.
7. Organization and employees are both dependent on each other to fulfill their goals and objectives. Therefore, employee engagement should not be understood as a onetime exercise but it should be integrated in the culture of the work place and embedded in its policies and procedures. Employee engagement needs to be part and parcel
8. There should be adequate and effective system of rewarding successful trainees. This includes promotion, advancement and status enhancement as well as increased responsibility. These will serve as encouragement for effective participation in staff training and development programs.
9. Finally, the programs should be continuously carried out to enhance productivity of staff, which is vital for sustainability and growth.
Private, Public, large, small, profit making and non-profit making should embrace the concept of human capital development as veritable tool for their optimized excellent performance. As a place where individuals with different skills, tribe, background and language meet, the design of training programs to harness these different peculiarities of workers is very keen. Despite the significance of the environmental factors that the organization required to be functional, people remain a major element in the coordination, processing and transformation of material resources into finished products. As such, this means that the people are key to organizational success; training and development therefore should be placed on high priority and must also be a continuous process in an organization in order to prevent any operational hitches.

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EMPLOYEE RETENTION: A PANACEA TO IMPROVE THE PERFORMANCE OF SELECTED MANUFACTURING FIRMS IN AKWA IBOM STATE.

Theresa, Eyo E. and Okon, Nse Bassey O.
Maritime Academy of Nigeria
Corresponding author: theresaedet@hotmail.com

ABSTRACT
This study looked into whether staff retention could be the key to helping a few manufacturing firms in Akwa Ibom State perform better. The purpose of the study was to determine how employee job satisfaction in a sample of Akwa Ibom State manufacturing firms was impacted by salaries and promotions. In this study, a survey design was used. Primary and secondary data were the two sources of data used in this investigation. Employees at Pristol Products, Alphastar Paints & Industries Ltd., and Jubilee Syringe Manufacturing Co. Ltd. make up the study population. The respondents' information was gathered using the basic random sample approach. To examine the link between the independent and dependent variables, a regression model was employed. For the purpose of the study, 149 questionnaires in all were given to the participants.To the respondents in the research area, a total of 149 questionnaires were issued. Results showed that in a subset of Akwa Ibom State's manufacturing firms, employee job satisfaction is highly impacted by pay and promotions. According to the study, in order to improve employee performance, salaries should be given weekly or monthly, as decided upon by the company and employee, taking into account the employee's position and terms of service. The study adds to our understanding of how companies might improve their hiring practices to draw in applicants who are more likely to be long-term employees.
Keywords: Employee Retention, Salaries and Promotion, Employee Job Satisfaction and Performance

INTRODUCTION

Since employees are the heart and soul of every business, employee retention is one of the most critical concerns facing companies that compete in the global market today. Generally speaking, it is better for a company to try to keep its talented employees rather than losing them and hiring no new ones (Branham, 2005). Since a high employee retention rate has an impact on both the performance of the employees and the organization, businesses all over the world are paying increased attention to and importance to this issue. Additionally, it raises the costs associated with hiring new staff and terminating existing ones as they are trained to fit within the organization's areas of expertise. Benefits offered by the company, employee disposition, and work output are all crucial factors in an organization's ability to keep talent (Branham, 2005). There are direct and indirect costs associated with replacing an employee for a business. These expenses cover headhunting, employing new employees, human resources, and advertising. Additionally, considering other metrics, providing workers with benefits like fair flexibility in balancing work and personal life, performance evaluations and pay raises based on performance, as well as more conventional benefits like paid time off and travel expenses, helps employers manage their employee retention rates. Consequently, the expenses incurred by businesses in replacing their workforce can be substantial, and the challenges posed by recruiting and on boarding new staff members need to be controlled. It can take years to replace the particular knowledge and abilities that people learn at work, therefore employers will have to make every effort to keep their skilled personnel (Sarah, 2009).

In addition, managers are now aware of new paradigms that suggest that in order to minimize expenses and optimize earnings, high-talent workers must be successfully motivated and retained through organizational restructuring, downsizing, consolidation, reorganizing, or re-engineering initiatives (Storey, 2005). More precisely, higher revenue, improved customer service, better productivity, and overall organizational survival have all been associated with personnel. In order to retain their workforce, management must address current employee concerns and put in place systems and tools (Fox, 2009).

Since employees are the active variables that work to bring about particular ends in businesses, employee retention can be a critical source of competitive advantage for every kind of business. Maintaining a staff and ensuring that employees stay devoted to their companies is a challenging undertaking for many enterprises. Maintaining a staff and ensuring that employees stay devoted to their companies is a challenging undertaking for many enterprises. The main focus of employee retention is the reasons behind employees' decision to stay with their present companies (Ejiofor & Mbachu, 2001). More than ever, businesses over the world are seeing the benefits of investing in their employees. But businesses know that

in order to maintain their competitive edge in the global economy, they must plan for staff development and retention (Carnegie, 2001). In light of these changes, it is crucial for businesses to outperform their rivals by keeping their staff. Furthermore, because staff and clients have inherently strong bonds, removing those individuals entirely may result in the loss of important customer connections (Ejiofor & Mbachu, 2001).

Employee turnover results from a company's incapacity to retain staff, and a high rate of employee turnover is expensive for both the firm and society at large (Ramlall, 2003). Because an organization's effectiveness frequently depends on the knowledge and abilities of its employees, it is crucial for firms to implement effective retention methods and indicators to keep competent people. Managers should be concerned about keeping a skilled staff since employee turnover results in a loss of intangible assets, such as intellectual capital, for the company. This study looked at staff retention as a magic bullet to boost the productivity of particular manufacturing firms in the state of Akwa Ibom. It's interesting to note that despite the structural differences throughout today's firms, the retention problem still exists and becomes worse. A change in prospective strategy is necessary to retain employees because some of the previous techniques used have not produced improved results. Research indicates that most Nigerian businesses need to be more inventive in their staff retention plans. Today's businesses don't foster an atmosphere that rewards employees for sticking with the company. Issues with employee retention are starting to emerge as the most important workforce management problems for the foreseeable future. According to research, manufacturing companies that are successful in the future will be those who continue to modify their organizational behavior to fit the demands of the modern workplace, where success and longevity are determined by adaptability, creativity, and innovation (Ramlall, 2003).

The dynamics of the workplace do not accurately represent a broad community of people with a wide range of motivations, values, and beliefs from one another and from the past (Caplan & Teese, 2007). According to research on employee retention, it is less expensive to court current staff members through talent management or employee development programs than it is to hire new hires because manufacturing companies often lack a thorough understanding of their workers' needs and preferences. On the other hand, the initial investment made in luring new hires has already been paid for. Research on employee retention makes it abundantly evident that contented workers are more committed to doing a good job and anticipate enhancing organizational success (Denton, 2000). The relationship between employee happiness and behavioral intentions, such employee retention, has not been supported by a number of studies (Anderson & Sullivan, 2003). Furthermore, the significance of strong employee involvement and how it could improve retention are not adequately explained by a number of researches (Arthur, 2004). Against this backdrop, this study seeks to examine employee retentionand its impact on the performance of Selected Manufacturing Firms; specific. it examines the effect of salaries and promotion on employee job satisfaction.

REVIEW OF LITERATURE

Employee Retention

It is an action taken by an organization to allocate certain resources in order to draw in, keep, and develop personnel and focus their skills on productive tasks. Attracting, recognizing, hiring, training, inspiring, elevating, promoting, and holding onto individuals with a high chance of success inside a company is known as employee retention. This is a reference to the hiring processes used to draw in and keep top talent (Schweyer, 2004). Employee retention is defined by Creelman (2004) as luring, enticing, involving, and holding onto skilled workers. But the key to employee retention is how a company hires, trains, and develops its workforce.

Moreover, it is evident that despite the sheer number of workers in a business, certain individuals are considered to be better than others.Most organizations would do their best to retain their superior employees because of the benefits they will bring. If organizations are truly willing to win the war in competition, then they need, in particular, to keep finding, nurturing and developing extraordinary people; they must develop a capacity and new approaches to employee management.

Employee retention is an all-round module of an organization's human resource strategies, which commences with the recruitment of the right people with the right skills required by the organization and continues with practices promoting employee engagement and commitment to the organization. The economic results could devastate an organization if companies cannot retain employees. A substantial amount of value could potentially be employed by a competitor or become the competition. Fatima (2011) conceptualizes employee retention as "the effort by an employer to keep desirable workers to meet business objectives". It is a relevant metric in which employees are encouraged to stay within the organization for

the maximum period or until the completion of the period. Fitzenz (2005) indicated in his study that employee retention is driven by various key factors like strategy, pay, benefits philosophy, organizational culture and career development, which ought to be administered congruently. Some of these issues are directly, and some are indirectly related to employee retention in the organizations. Retention is considered one of the challenges organizations face, which is a bigger movement in a global learning society. The meaning of retention varies from the mechanical (reducing the employee turnover figure to an acceptable level) to the abstract (about culture and value). He went further to say that the meaning can be couched in curt, wholly objective phase or a flowery, vague corporate language by seeing it as a distinct, controllable element of labour management or viewed as a cross-functional, pervasive and seemingly all-encompassing set of values or methodologies which centres on how to treat people (Fatima, 2011).

Employee retention is a process in which the employees are encouraged to remain with the organization for a maximum period or until the completion of the project. Gary (2008) described retention as a systematic effort by an employer to create and foster an environment that encourages current employees to remain employed by having policies and practices that address their diverse needs. It can then be deduced that employee retention strategies are policies and practices organizations adopt to prevent valuable employees from leaving their jobs while at the same time securing their trust and loyalty to have less of a desire to leave in the future. The preliminary retention motive includes five major elements, namely compensation (financial and non-financial incentives); environment (physical structure, surroundings and atmosphere of the workplace); growth (advancement prospect and development on the job via organization); relationship (mode of interactions existing between employer and employees, superiors and subordinates, subordinates and subordinates, organization and the outside world) and support (assistance to needy employees). Human resource professionals and researchers believe that employee retention is an important business survival tool, and it is a serious matter. Retaining talented and skilled employees is critical to long-term health and success. The research on employee retention made it abundantly evident that only contented workers who are pleased with their positions and their employers are more committed to carrying out their duties effectively and forward-thinking (Denton, 2000). A lower employee turnover rate is the consequence of satisfied workers intending to stay with their company longer. Therefore, in order to compete effectively, every business uses a variety of efficient retention methods to meet the unique needs of its workforce and foster an atmosphere that motivates people to work for the company for an extended period of time. The current study investigated the effects of six employee retention strategies—employee engagement, training, job security, work environment, employee motivation, and employee-employer relationship—based on the body of existing literature (Denton, 2000).

Salary and Promotion

A promotion is the equivalent of moving up the corporate ladder; to put it another way, a promotion is the transition from one lower position to a higher one. Promotion is the secret to job contentment for some people. They feel more powerful and content because they believe that their standing has improved. It might be difficult to promote workers in order to increase job happiness unless there is a valid reason to believe that doing so will fix problems with job satisfaction. Individual employees have different motivations for wanting to be promoted. A higher-status job or a better relationship with their supervisor may be the reasons for some people's desire for promotion, while others just want to move up because they are dissatisfied with their current position and believe their skills are not being fully exploited. Salary and promotions are examples of extrinsic rewards, which are financial benefits that increase job satisfaction (Nawaz, 2017).

Gupta (2011) states that promotion is the advancement of an employee to a higher post carrying greater responsibilities, higher status, and a better salary. The author further stated that promotion is an upward movement of an employee in the organization's hierarchy to another job commanding greater authority, higher status, and better working conditions. Promotions are used to reward employees for better performance and to motivate them for greater effort.Promotion is an increase of labour or employee at a field a better job, compared with the previous of the responsibility is greater, achievement, facilities, higher status, demands proficiency is higher and the addition of wages or salaries as well as other allowances. Harbison (2002) gave the following promotion indicators: (1) increased responsibilities, (2) increased duties, (3) enhanced rights, and (4) improved authority. Increased responsibility is a rise in the degree of duty or obligation assigned to a person by the nature of that person's position, function, or work. It is also a rise in a bundle of obligations associated with a job or function. In this sense, promotion can come in the form of higher responsibilities, which is more than just the primary function of a role. Rather, it is the multiple facets of that function, both processes and outcomes, and it also includes moral obligationsHarbison (2002).

Salary

Brunetto *et al*. (2002) opine that salary is a fixed amount of money paid to a worker, usually measured on a monthly and annual basis, not hourly; as opposed to wages, salary is a fixed amount of money or compensation paid to an employee by an employer in return of work done. The author stated that self-equity is perceived as less relevant since an organization can do little about its employees' perception of inequity concerning their financial needs or historical pay evolution. A basic salary is a fixed periodical payment for non-manual employees, usually expressed in annual terms, paid per month with generally no additions for productivity. Wage refers to payment to manual workers, always calculated on hourly or piece rates. The authors, in their definition, differentiated the meaning of salary and wages, making it clear that the two concepts serve as a form of earning for work, but while the other is a fixed payment received monthly or annually, the other serves as pay for manual workers on hourly or piece rates. Salary is a fixed amount paid to employees regularly for performance and productivity. In contrast, wages are the hourly payment given to labourers for the work finished in a day. The author further argued that salaried persons are generally said to be doing white-collar office jobs, implying that an individual is well educated and skilled, is employed with some firm, and holds a good position in society. In contrast, the waged person is said to be doing blue-collar labour jobs, which implies that an individual is engaged in a skilled or semi-skilled job and draws daily. One purpose of a person as an employee of a company is to earn income in the form of wages or compensation, and employees' salaries help them meet basic needs such as food, clothing, and housing. However, every company determining the wages to pay their employees must be feasible so that the lowest wage earner can meet their basic life needs (Kyari et al., 2005).

Nwankwo *et al*. (2010) further argued for the importance of salaries and wages in Nigeria. They stated that wages should not only be adequate, but they must also show some equity element; this is particularly true from the employees' point of view. Anything short of a fair and equitable wage or reward can quickly attract the wrath of employees in an economy such as Nigeria. For many Nigerian employees, wages or salaries are highly critical issues. They are decisive because without them in sufficient quantities, life becomes extremely precarious for the worker and members of his/her family. As direct financial rewards, wages and salaries are the most emphasized by the employees, they take centre stage in the rewards scheme for work. In addition to increasing job happiness, Rawat (2013) reaffirmed that monetary compensation and recognition are the key components of employee motivation, as well as individual status assignments and employee appreciation. Whether it's a time performance or a repetitive task, rewards improve performance and productivity at work in a step-by-step manner. In their contribution, Sarah (2009) confirmed that reward and recognition—which serve as motivation and satisfaction—have a statistically significant link. According to the study, there would be a comparable change in job motivation and satisfaction if rewards or recognition were to be changed for employees (Sarah, 2009).

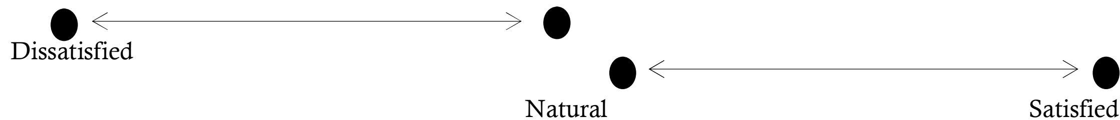
Theoretical Framework

Herzberg's two-factor theory (Frederick Herzberg, 1959)

The dual-factor theory, also known as Herzberg's motivation-hygiene theory or Herzberg's two-factor theory, was created by psychologist Herzberg in 1959. It contends that while some workplace conditions lead to job discontent, other ones are responsible for job contentment. Basics of two-factor theory: Maslow's idea of motivation is connected to attitudes and how they relate to industrial mental health. Regarding extrinsic and intrinsic factors, Herzberg derived hygiene (dis-satisfiers) related to the work environment, such as pay, benefits, company policy, supervisor, work conditions, leadership style, or collaborating with sociable and capable coworkers, and motivation factors, which comprise the work dimensions of autonomy and responsibility.Motivators, sometimes referred to as satisfiers, encourage employee growth and development, resulting in satisfaction, whereas hygiene factors, also called dissatisfiers, can prevent dissatisfaction with a job but do not contribute to job satisfaction.

According to Herzberg (1959), individuals are not content with the satisfaction of lower-order needs at work, for instance, those associated with minimum salary levels or safe and pleasant working conditions, but rather individuals look for achievement, recognition, responsibility, advancement, and the nature of the work itself. However, Herzberg (1959) added a new dimension to this theory by proposing a two-factor model of motivation based on the notion that one set of job characteristics or incentives leads to worker satisfaction at work while another set of job characteristics leads to dissatisfaction at work. Thus, satisfaction and dissatisfaction are not on a continuum, with one increasing as the other diminishes, but are independent phenomena. This theory suggests that to improve job attitudes and productivity; administrators must recognize and attend to both sets of characteristics and not assume that an increase in satisfaction leads to a decrease in unpleasant dissatisfaction.

Herzberg's Description of Satisfiers and Dis-satisfiers



This theory explains how an employee gets dissatisfied if the hygiene factors are low, but at the same time, if these factors are high, it means that the employee is not dissatisfied. The satisfaction or dissatisfaction of an employee largely depends upon the motivators. There may be certain circumstances where an employee may have a mixed feeling of being satisfied and unsatisfied at the same time or maybe neither satisfied nor unsatisfied (Herzberg, 1959).

METHODOLOGY

In order to precisely and methodically define the variables in the study region, this research used a survey design. Primary and secondary data were the two sources of data used in this investigation. Three (3) manufacturing companies in Akwa Ibom State were the focus of the study. Therefore, all employees of Jubilee Syringe Manufacturing Co. Ltd., Alphastar Paints & Industries Ltd., and Pristol Products make up the study's population of 238. As a result, 149 respondents made up the study's sample size. The respondents' information was gathered using the basic random sample approach. A standardized questionnaire with a 5-point Likert scale that read strongly agree (5), agree (4), neutral (3), strongly disagree (2), and disagree (1) served as the primary data collection tool. The validity test applied to this studywas legitimacy of material. The degree to which the instrument assesses the overall appearance and topic matter in accordance with the goals of the study is known as content validity. To examine the link between the independent and dependent variables, a regression model was employed. To the respondents in the research area, a total of 149 questionnaires were issued. Of this total, one hundred and thirty-nine (139) were returned, and ten (10) were excluded because of anomalies in the pattern of responses. These 93.3% of responses served as the foundation for this investigation.

RESULTS AND DISCUSSION

Table 1: Ascertain the impact of Salaries and Promotions on employee job satisfaction of Selected Manufacturing Firms in Akwa Ibom State.

RESPONSES	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	SD
Weekly salary enhances employee satisfaction	110	20	9	- -	- -	657	4.7	.754
Monthly pay boosts employee working morale	78	42	-	10	9	587	4.2	.978
Annual payment enhances employee performance	56	49	4	15	15	533	3.8	1.52
Advancement in position motivates employee morale	115	24	- -	- -	- -	671	4.8	.750
Increase in salary boost employee job satisfaction	100	30	- -	9	- -	638	4.6	.825

Source: Field Survey, 2023

The impact of salaries and promotions on work satisfaction among employees in specific manufacturing firms in Akwa Ibom State is displayed in the above table. According to the decision rule, all five (5) Likert scale points were decided using a score of $(x)\bar{3}.00$. With the highest mean scores of 4.8, 4.7, 4.6, and 4.2, respectively, most respondents strongly agreed that weekly pay increases employee satisfaction; salary increases also boost employee job satisfaction; annual payments improve employee performance; monthly pay raises employee morale at work; and position advancement inspires employee morale. Businesses want to foster an environment where workers will receive better pay and promotions when they deserve them. Paying salaries according to the terms set forth between the employer and employee, whether on a weekly or monthly basis, in keeping with the worker's stance on improving worker performance.

Ho_1: Salaries and Promotion have no significant impact on employee job satisfaction in Selected Manufacturing Firms in Akwa Ibom State

Table 2: Regression analysis of Salaries and Promotion on employee job satisfaction

Variable	Parameters	Coefficient	Std error	t – value
Constant	β_0	0.061	0.047	1.298
Salaries and Promotion (X_1)	β_1	0.242	0.097	2.495**
R-Square		0.678		
Adjusted R – Square		0.540		
F – statistics		7.568***		

Source: Field Data, 2023

The coefficients of salaries and promotions on worker job satisfaction are displayed in the above table. The coefficient of multiple determination (R2) was 0.678, indicating that the regression model used in this study had a good fit and was statistically significant at the 1% probability level. This means that changes in the independent variable explained 67.8% of the variations in dependents, while the stochastic variable left 32.2% of the variations unexplained. At the 5% level, the coefficient of salary and promotions was positively correlated with employee work satisfaction and statistically significant (2.495**). This suggests that in certain manufacturing firms in Akwa Ibom State, employee job satisfaction is highly impacted by pay and promotions. With the highest mean of 4.8, 4.7, 4.6, and 4.2, respectively, most respondents strongly agreedthat receiving a weekly salary improves worker contentment, and receiving a raise increases worker job satisfaction Annual compensation improves worker performance. Pay increases each month, which encourages employees to perform more and be more motivated by position development. Businesses want to foster an environment where workers will receive better pay and promotions when they deserve them.

Paying salaries weekly or monthly in accordance with the employee's position to improve performance should be the mutual agreement between the company and employee. Domfeh, (2012). According to the report, competitive wage packages, a promise of job security, demanding and fascinating work possibilities, and excellent prospects for training and development are the key tactics used by HR managers of rural banks to keep staff members on board. The survey also showed that because the aforementioned retention methods were not well executed at the individual banks, employees' intentions to quit were high. The lack of jobs in the economy was the primary cause of the long tenure of the staff at the rural banks. It was discovered that the performance of the chosen rural banks is positively impacted by employee retention.It lowers turnover costs and avoids disruptions to customer service and corporate knowledge loss.

CONCLUSION AND POLICY IMPLICATIONS

Organizations that want to draw in and keep top talent must use appropriate retention metrics. Workers must have a sense of worth and appreciation. The study also showed that, in a subset of Akwa Ibom State's manufacturing firms, salaries and promotions have a major impact on workers' job satisfaction. In conclusion, research on employee retention can provide insightful information that aids businesses in lowering attrition, improving the appeal and supportiveness of their workplace, and eventually achieving their strategic objectives with a loyal and contented staff.

Businesses should create regulations that guarantee equitable and competitive benefit packages. Review benefits and pay schedules on a regular basis to recognize staff members' efforts and to stay competitive in the employment market.

The study's participating organizations should create work-life balance-promoting policies, such as paid time off, flexible work schedules, and family-friendly regulations. Maintaining a good work-life balance helps increase employee retention and happiness.

Businesses should set up procedures for identifying and compensating top performers. Bonuses, incentives, and recognition programs can encourage staff members to stick with the company and keep doing well in their jobs.

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CHANGE MANAGEMENT MECHANISMS FOR IMPROVED EMPLOYEE PERFORMANCE: A STUDY OF NIGERIAN COMMUNICATION COMMISSION AND TELECOM NETWORKS ABUJA, NIGERIA

Onwumelu Odinakachi P., Godwin, lyowuna D. P. and Okafor, Chinyere S.
Michael Okpara University of Agriculture, Umudike
Corresponding author: onwumelu.odinakachi@mouau.edu.ng

ABSTRACT
This study examined change managementmechanisms for improved employee performance in the Nigerian Communication Commission and Telecom Networks in Abuja, Nigeria.Specifically, the studyinvestigated the effect of technological change on employees' performance in the Nigerian Communication Commission and Telecom Networks Abuja.A sample of 202 was used, and the data was analyzed using Z-test statistics. The result revealed that technological change significantly affects employees' performance.The study concluded that change management positively affects employees' performance and recommends that telecom companies in Nigeria are encouraged not only to adopt the appropriate technology but also always to respond to changes in technology, and they are encouraged to adopt lesser layers in the organizational hierarchy.
Keywords: Change Management Mechanisms, Employees' Performance, Technological Change and Organizational Structure.

INTRODUCTION
Change presses us out of our comfort zone and is inevitable. Kitur (2015) believes that change comes in an organization in many forms: merger, acquisition, joint venture, new leadership, technology implementation, organizational restructuring, and change in products or regulatory compliance. The change may be planned years in advance or forced upon an organization because of a shift in the environment. Organizational change can be radical and alter how an organization operates, or it may be incremental and slowly change how things are done (Green, 2007). For change management to be successful and its impact positive, managers or supervisors in the organizations need to understand what motivates their team and enrol employee participation.
The Nigerian telecom industry was for almost five decades independent as a public enterprise, and the industry continues to remain non-performing and, in most cases, epileptic in functioning; however, the coming of another democratic dispensation in 1999 (after several years of military rule in the country), the industry became one of the areas that the then President of Nigeria (Olusegun Obasanjo and its party) focused attention unto in order to deregulate it. The industry's deregulation brought private participation, and many telecommunication firms boarded. The major ones that came on board are Ntel, Mtn, Globacom, Multilinks, Econet, Airtel, and many others. However, today, Ntel has gone under the drain, while others like 9mobile came on board, and Econet, now Airtel and 9mobile have had course to change their management and identity almost four times; this is not unconnected with the increasing volatility of the business environment, which necessitates change management (Sidikova, 2011).
The Nigerian telecom industry was for almost five decades independent as a public enterprise, and the industry continues to remain non-performing and, in most cases, epileptic in functioning; however, the coming of another democratic dispensation in 1999 (after several years of military rule in the country), the industry became one of the areas that the then President of Nigeria (Olusegun Obasanjo and its party) focused attention unto in order to deregulate it. The industry's deregulation brought private participation, and many telecommunication firms boarded. The major ones that came on board are Ntel, Mtn, Globacom, Multilinks, Econet, Airtel, and many others. However, today, Ntel has gone under the drain, while others like 9mobile came on board, and Econet, now Airtel and 9mobile have had course to change their management and identity almost four times; this is not unconnected with the increasing volatility of the business environment, which necessitates change management (Muo & Muo, 2013).
In Nigeria today, the major participants in the industry are Mtn, Airtel, Globacom, and lately, Etisalat, now 9mobile. Due to the increasing business environment volatility, change management has become inevitable. This addresses any or all of these issues of poor performance, adapting to changes arising from external environmental pressures, achieving or maintaining a competitive advantage (in terms of better price and high quality), and explicit innovation. Fundamentally, organizational change emanates from

two major external and internal sources. External sources could result from improved technology and pressure from interest groups outside the organization, such as the government or competitors in the industry. The internal source of change could be from individuals such as shareholders, management, and employees. Irrespective of the source, wherever change is obvious, the management is always faced with the question of how to respond to this change (Ndahiro *et al.*, 2015).

The telecommunication industry is an integral segment of the information technology sector sensitive to external environmental changes. In order to remain competitive, telecoms must be flexible to react and adapt to external environment challenges quickly. Due to the close interaction and relationship between employees and managers, there can be direct effects on telecommunication performance when internal and external changes occur. Go and Pine (2005) state that rapid and unpredictable changes in customer attitudes and information technology make the need to manage changes inevitable and that the ability to manage is the key to the long-term survival of telecommunication companies. McLagan (2009) also claims that factors such as uncertain economic and political conditions, changes in social attitudes, fierce competition, take over, acquisitions, technological developments and governmental interventions create an increasingly volatile environment for the telecommunication industry, and consequently, they can only perform effectively through flexibility and responsiveness to change.

In order to compete globally, the telecom industry has embraced change management factors such as culture, technology, leadership and structure, which affect both employee and organizational performance. In order to remain competitive, the telecom industry has adopted leadership and organization structures known to every employee, which add value to their performance; for instance, customers value quality networks. Also, leadership changes may influence employee performance. As a person in charge or as a change agent, the leader can manage an organization or the process of organizational change more effectively and successfully if he/she is capable and competent (Appelbaum, 2012).

Change management on employees' performance concept grew out of the need to make some alterations within the organization to cope with the dynamic market changes. Organizations face threats of competition and changing employees' needs, which must be met using techniques and production models different from the existing ones (Kotter, 2008). Change management on employees' performance can be reactive, responding to changes in the macro environment, proactive to achieve the desired goal, continuous basis, or program-by-program basis (Davidson, 2002).

Nowadays, telecommunication companies witness dramatic changes at all levels (Okechukwu & Ugwu, 2015). There are many drivers for change in the telecommunication sector, caused by technological advancement, fierce competition that has risen drastically in recent years, and the need to develop new services in the telecommunication sector. Telecommunication organizations need razor-sharp reflexes to cope with the fast-changing technologies and management skills. Therefore, change management is a vital tool to be adopted by the telecommunication sector to maintain development and growth. Telecommunication is an integral segment of the service sector. It is fundamental to the serious economic development of any nation, but it is highly technologically involved; for firms involved in this industry to remain competitive, they must be flexible to quickly react and adapt to external environmental changes, especially those that relate to technological changes (Okechukwu & Ugwu, 2015).

The Nigerian telecommunication industry is fast growing, continuously necessitating dynamic changes in organizational activities relating to structuring customer handling and product portfolios. The managers of these firms in this industry are continually on each other's toes, trying to outwit others by devising new strategies which change and, at the same time, minimize the cost of change implementation. Going by the number of participating firms in the industry as of 2001, when the sector was deregulated, and the few existing ones now, one could not be baffled. Many of these firms that have gone under have not effectively managed the change that occurred in the industry, eventually sweeping them off. The poor survival rate indicates a fundamental need for a valid framework for implementing and managing organizational change. This indicates that much to change management needs to be learnt (Sidikova, 2011). Based on unassuming changes in the telecommunication industry, this study is carried out to unveil the hidden facts of how technological change is affecting this industry. When change is not properly managed, there is the tendency to affect employee performance negatively, which may result in the total closure of the organization, as it happens to many of the firms in the industry, or loss of valued employees or failure to meetfinancial objectives of shareholders and may eventually degenerate into customers dissatisfaction who could easily move to other competitors thereby affecting the overall performance of the firm (Kinoti, 2015).

Also, no matter the degree and content of the change, its implementation can still pose large problems for organizations and their staff. Getting people to accept and implement the new methods of doing things

takes much work. Most changes can disrupt group work. Resistance can seem irrational and develop without warning, interrupting any activity. Survival of the organization will depend on the ability to adapt to change and the demands of its external environment. Commitment to the objectives and policies of the organization, people's cognitive limitations, uncertainties and fears may mean a reluctance to accept change. Organizations may also find it difficult to make short-term, rapid changes in resource allocation, and the very complexity of environmental influences hinders rapid change (Garber, 2013).

Mass layoffs, mergers, and acquisitions produce negative psychological responses in the surviving workforce. Layoff survivors, for example, tend to become more insecure about their jobs, less likely to innovate and take risks, less committed to their organization, and less trusting of top management (Khatoon& Farooq, 2016). Similar negative outcomes, including increased anxiety and anger at the loss of old identities, have been reported for employees in companies that have merged or been acquired (Seo & Hill, 2005). In other words, the stress can be overwhelming when an employee is also dealing with a mental health issue such as anxiety or depression. In some organizations, constant change is the norm, which may contribute to poorer mental health for some employees. Ideally, employee performance has been on the rise due to most organizations' improvement and adoption of change management. This is because change management greatly influences employees; therefore, if the proper change is adopted and implemented, it results in increased employee performance. This is simply because, in every change proposal, there are always forces for change and forces against change (Sidikova, 2011). These have constituted serious problems for the communication sector, which has motivated the study to unravel the need for change management to achieve employee performance and business growth. Specifically, the study examines the nexus between technological change and employee performance.

REVIEW OF LITERATURE

Change Management Mechanisms

Change is one of the difficult challenges that organizations face these days. Robbins (2003) defines change as making things different. Change is everywhere; it is unavoidable, and it needs successful handling to make organizations navigate successfully through it (Davidson, 2002). Burne s(2004) stated that undergoing a new change is the most difficult matter, and it is questionable if it is successful. It always has enemies who are beneficiaries of the old system.

Kamugisha (2013) define change management as the effective management of a business change such that executive leaders, managers, and frontline employers work together to successfully implement the needed process, technology, or organizational changes. Hurduzeu (2015) define change management as the process of continually renewing an organization's direction, structure and capabilities to serve the ever-changing needs of external and internal customers.

Burnes (2004), like many other scholars, asserted that change is an ever-present feature of organizational life at the operational and strategic levels. Due to its importance, change management is becoming imperative and needs appropriate managerial skills and strategy. For firms to survive, succeed, and remain competitive in today's highly volatile and continuously evolving business environment, they must be able to manage the change successfully, which is a necessity. Even though there has not been a consensus on the framework for organizational change management, there is an agreement on two important issues. One, there is a consensus that change, being triggered by internal or external factors, comes in all shapes, forms and sizes. Davidson (2002) explains that change refers to an important difference in what was before; it can include doing work in new ways, using new tools or systems, using new reporting structures, using new roles in the job, producing new products or introducing new services, following new managerial procedures, merging, reorganizing or other unrest and change in job location or markets. Therefore, change management is taking a proactive approach to how the change is treated within an organization.

Furthermore, Ayodeji and Adebayo(2015) emphasized that change management is more than just a process that stands alone for designing a business solution. However, it is about realizing human reactions and anticipating the best strategy to deal with them. Change management makes it easier for organizations to succeed in meeting demand and facing internal and external challenges (Dauda, & Akingbade, 2011). Organizational change is affected by outside challenges that cause internal instability (Mou, 2013). The external changes from the marketplace can include loss of market share, competitors' acceleration in creating new offers, lower prices, and new business opportunities for growth. O'Neill (2012) states five driving forces that affect organizational change: A high degree of talent needed to solve problems in "high-level activities", "mobile technology", the need for innovation, and distributed work that relates to the evolution toward less centralized organizational structures, location and work practices, and sustainability. Thomas (2014) mentioned that to get confidence from employees, you must respect them.

Another aspect of building trust with employees is that one must share information with them as much as possible. The researcher noticed that change reinforcement must be considered in the current change management practices. The researcher observed that there are no rewards or recognition for those who committed to change after implementation. In addition, there is no celebration of the early success. This is related to the fact that top management and change leaders needed to be informed about the importance of change reinforcement in the continuity of this change. The absence of change reinforcement leads to difficulties involving individuals in the change (Dauda & Akingbade, 2011).

Employees' Performance

Employee performance is vital for the success and profitability of every organization in this dynamic environment. The organization requires employees who contribute more than their job scope and are far from goals and expectations. Most of the organizations managing with contemporary challenges put more emphasis on employee performance. According to some authors, service firms like the telecom sector invest more in their workforce to maintain long-term relationships with them and increase their performance and job satisfaction. Downsizing, mergers, innovations and restructuring of the organizations usually decrease employees' performance. In addition to that, task, quantity, quality, changing location, and time constraints affect employees' work lives. Nowadays, many companies face current challenges and need to concentrate more on increasing employees' performance. Hence, managers must give employees more power to design their jobs and roles to connect invaluable performance. Thus, employees will find their jobs more fit between employees' needs, skills and values. The deficiencies of employee performance will be overcome by effective leadership, communication, motivation, employee development, tolerance to change, procedural justice, and organizational culture. Some of the following effects may occur on employees' performance due to an organizational change (Georges, 2015).

Theoretical Framework

Contingency Theory by Joan Wood (1956)

Contingency theory is a behavioural theory that claims that there is no single best way to design organizational structure. The proponent of the contingency theory was Joan Wood (1956), who argued that technologies directly determine organizational attributes such as span of control, centralization of authority, and the formalization of rules and procedures to be followed by employees. The theory found many variations in organization structure associated with differences in manufacturing techniques, which considerably change employees" performance. Contingent theory is based upon various constraints in an organization. The constraints may include the organization's size, how to adapt to its environment, differences among resources and operations activities, and managerial assumptions about employees' strategies.

In this study, the contingent variable is focused on and anchored on managerial assumptions about change in employees and performance as a constraint variable. This approach to the study of organizational behaviour, in which explanations are given as to how contingent factors such as technology, culture and the external environment influence the employees and functions of organizations for meaningful changes, clearly shows that employees must be fully engaged for performance-based results. The assumption underlying contingency theory is that no single type of organizational structure is equally applicable to all organizations. Rather, organizational effectiveness is dependent on a fit or match between the type of technology, environmental volatility, the size of the organization in terms of human capital, the features of the organizational structure and its information system.Contingency theory identifies each contingency factor upon which the structure under consideration is dependent (Zondi& Mutambara, 2016). Task uncertainty is the most studied contingency factor. The factor is a focal point since it involves employees to realize meaningful change. Pugh(2007) argues that if the organization is concerned with many uncertain tasks, then the organization is less centralized, and instead, more richly joined structures are necessary to generate and communicate a larger amount of knowledge and communication to employees' remarkable performance. In contrast, if an organization is very certain about its tasks, the tasks get more centralized. Another contingency factor is size.

Empirical Review

Technological Change and Employees' Performance

Wanza and Nkuraru (2016) assessed the effects of change management on employee performance at the University of Eldoret, Kenya. The study adopted a case study research design. The target population was 403 employees. A sample size of 121 employees was selected using a simple random sampling technique. Primary data was collected using questionnaires and interview schedules. Analysis was done using

descriptive statistics and presented using graphs and tables. The study found that structural changes and organizational leadership positively influenced university employees' performance. The study further revealed that technological changes greatly impact employees' performance due to the rapid technological changes that the world is rapidly adjusting, which eases employees' workload and increases efficiency and effectiveness in the workplace. A strong organizational culture creates synergy and momentum, encouraging teamwork and enhancing employee performance. The study concluded that structural changes, leadership, technology and organizational culture positively influence employees' performance.
Okeke *et al*. (2019) examined change management and organizational performance in Anambra State, Nigeria manufacturing companies. Relevant conceptual, theoretical and empirical literature were reviewed. This study was anchored on organizational change and Lewin`s Three Step Model. Descriptive survey design was adopted, and primary data was employed. The population for the study was 286 employees working at the selected manufacturing companies in Anambra State. The entire population was used as the sample size for this study. The major instrument used for data collection was the questionnaire. Content Validity was adopted, and the test-retest method was used to test the reliability of the research instrument. The study found that technological changes have a positive significant effect on organizational performance in manufacturing companies. Change management strategies have a positive significant effect on organizational performance in manufacturing companies in Anambra State. Leadership changes have a positive significant influence on organizational performance in manufacturing companies in Anambra State. The study concluded that change management positively affects organizational performance in manufacturing companies in Anambra state.

METHODOLOGY

In order to attain the earlier stated objectives, a survey was carried out amongst the chosen telecommunication firms in Abuja, Nigeria. The whole population of the chosen firms is 410. However, the Taro Yamane formula was used to determine the sample size 202. Thus, a total of 202 questionnaires were allotted to the staff of the chosen telecommunication firms, which served as the respondents of this study.A stratified sampling approach was used in this study. This approach was used because it gave the respondents an equal chance of being selected. The independent variable (change management) was measured regarding technological change and organizational structure. The test-retest reliability was used to test the internal consistency of the research instrument, and the instruments were deemed to be reliable with a Cronbach alpha value of 0.947and 0.959, respectively. The dependent variable (employees' performance) was measured with 8 items. The reliability of the items for employee performance gave a Cronbach value of 0.963. Items were rated on a 5-point Likert scale ranging from 5 - "Strongly Agreed", 4- "Agreed", 3 - "Undecided", 2 - "Disagreed", and 1 - "Strongly Disagree".The z-test model was used in analyzing the earlier state hypotheses via the help of the Statistical Package for Social Sciences (SPSS) model 22.Out of the 202 questionnaires distributed to respondents, only 138 (70.4%) copies were returned and formed the basis of the study. The hypotheses test is undertaken at a 95% confidence interval, implying a 0.05 significance level.

RESULTS AND DISCUSSIONS

Investigate the effect of technological change on employees' performance in the Nigerian Communication Commission and Telecom Networks in Abuja, Nigeria. ***n= 138***

Options	SA	A	UN	SD	D	TOTAL	MEAN
Telecom management adopts modern technology and works to change its operations to be digitalized	67	43	12	11	5	570	4.1
Technological systems are consistent with the new and most advanced methods of choice and supply.	62	46	9	12	9	554	4.0
There has been great improvement in the hiring and recruitment processes due to adaptation to technological change.	67	39	15	9	8	562	4.1
Technological change management can improve employees' performance and productivity.	72	42	9	8	7	578	4.2

Source: Field Survey, 2023

Decision Rule

Where P < 0.05 = Reject the null hypotheses

Where P > 0.05 = Accept the null hypotheses

The table above shows the effect of technological change on employees' performance in the Nigerian Communication Commission and Telecom Networks in Abuja, Nigeria. The majority of the respondents strongly agree that technological change management can improve employees' performance and productivity (x= 4.2); Telecom management adopts modern technology and work in changing its operations to be digitalized (x= 4.1); there has been great improvement in the hiring and recruitment processes due to adaptation to technological change (x = 4.1) and Technological systems used are consistent with the new and most advanced method of choice and supply (x=4.0).

$H0_1$: Technological change does not significantly affect employees' performance in the Nigerian Communication Commission and Telecom Networks in Abuja, Nigeria.

Z-Test on Technological change and employees' performance (One sample Z test)

Z- statistic	P-value	Sample Mean
2.28142	0.02745	0.04275

Source: Field Survey, 2023

The result from the Z-test showed the effect of technological change on employees' performance in the Nigerian Communication Commission and Telecom Networks in Abuja, Nigeria. The value of the Z-statistic was 2.28142, which is greater than the 1.96 benchmark for the acceptance level for the test. The sample mean is 0.04275, which is larger than the population size, with a p-value of 0.02745 <.05 significance level. Therefore, the study rejects the null hypothesis and accepts the alternative hypothesis, which states that technological change significantly affects employees' performance in the Nigerian Communication Commission and Telecom Networks in Abuja.Most respondents strongly agree that

technological change management can improve employees' performance and productivity, and telecom management adopts modern technology. It works to change its operations to be digitalized, and there has been great improvement in the hiring and recruitment processes due to adaptation to technological change. Technological systems used are consistent with the new and most advanced methods of choice and supply. The study of Wanza and Nkuraru (2016) found that structural changes and organizational leadership positively influenced university employees' performance. The study further revealed that technological changes greatly impact employees' performance due to the rapid technological changes that the world is rapidly adjusting, which eases employees' workload and increases efficiency and effectiveness in the workplace. A strong organizational culture creates synergy and momentum, encouraging teamwork and enhancing employee performance. The study concluded that structural changes, leadership, technology and organizational culture positively influence employees' performance.

CONCLUSION AND POLICY IMPLICATIONS

The adoption of change management mechanisms affects employees' performance in various dimensions. This study sought to investigate the influence of change management on employee performance in telecom companies operating in FCT, Abuja. Change managementmechanismswere measured in terms of technology, organizational structure, roles and responsibilities and leadership. Technology and organizational structure have a positive effect on employees' performance. Technology enhances quality service delivery to telecom customers, and once a strong organizational structure is built, it will gain momentum of its own and help people feel valued and express themselves freely. The excitement and energy will end up being a positive influence that affects employee performance positively.

Organizations should develop clear and comprehensive communication policies ensuring timely and transparent dissemination of changes-related information. Effective communication helps build understanding, reduces uncertainty, and addresses employee concerns.

Firms should implement policies that mandate the involvement of key stakeholders, including employees, in the change management process. This can include establishing cross-functional teams, conducting focus groups, and seeking input to ensure diverse perspectives are considered.

Create policies that allocate resources for training and development programs to equip employees with the skills and knowledge required for the upcoming changes. Training ensures a smoother transition and builds confidence among employees.

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IMPACT OF TECHNOLOGICAL INNOVATION ON THE PERFORMANCE OF SELECTED PRIVATE FIRMS IN ABIA STATE

[1]Udoyiu Edem Udoyiu and [2]Okebaram, Sunday M.
[1]Heritage Polytechnic, Akwa Ibom State, [2]Michael Okpara University of Agriculture, Umudike.
Corresponding author: udoyiuudoyiu@heritagepoly.edu.ng

ABSTRACT
The study focused on the impact of technological innovation on the performance of selected private firms in Abia State. The study sought to assess the impact of technology innovation on the performance of selected private firms in Abia State. The study used a descriptive design. The study employed both primary and secondary sources. The total population of the study is 140. The sample size of the study was 104. A simple random technique was adopted in this study. A regression model was employed to test the hypothesis of the study. The study concluded that technological innovation significantly impacts the performance of Selected private firms in Abia State. The study recommended that firms should make sure that they adapt to the changes in technology and innovation by implementing and collaborating on ideas, products, services, and attitudes on organizational learning.
Keywords: Technological, Innovation, Performance and Private Firms

INTRODUCTION
In a highly competitive environment, businesses must continuously learn and innovate to survive in the market. Therefore, failure to innovate may result in declining firm performance. Continuous learning is crucial to improving firm capabilities. Thus, technological learning, output, and knowledge are keys to innovation. Therefore, technological and innovative learning is important for firm speed and flexibility in the innovation process towards enhancing organizational performance (Doran & Ryan, 2014). It is noted that learning is regarded to be the driver of innovations and innovative ideas within an organization; since organizational learning and technological innovation are two closely related phenomena, managers should endeavor to improve the learning capabilities of employees in the generation of innovation to gain a competitive edge in the turbulence market (Haneda *et al*., 2014).
Furthermore, innovation implies generating, accepting, and implementing new ideas, processes, products, attitudes, or services. Technological innovation is utilizing new ideas and their application to organizational management through training and learning. The new ideas may be incarnated in products, processes, and management or marketing systems (Pokharel & Choi, 2015). The degree of technological innovativeness depends on the level of learning, orientation, and training the organization gives its employees. Since employees are the bedrock of every organization, managers should be fit to train and develop their staff to use the new inventions of technologies for product development and customer satisfaction (Cheng *et al*., 2014). Innovation and thorough and effective exploration and discovery of new manners substituting existing ones are usually encouraged by innovation.
Learning helps companies maintain sustainable competitive moods and weather any possible upcoming and unexpected turmoil. This learning could be through individual, group, and organization. However, when there is synergy in learning, it improves the performance of both the team and individual to share ideas and knowledge on new products, new technology, services, and processes; thus, learning orientation affects the organizational performance of a firm. To cope with the current external opportunities and threats, organizations must acquire new knowledge and skills to improve their existing and future technological innovation (Cheng et al., 2014). Therefore, this study examines the impact of technology innovation on the performance of selected private firms in Abia State.
There has been a backdrop to technological innovation's success in several organizations, where attitudes, learning orientation, knowledge, and skills of employees about technology and innovation have drastically reduced; this might be due to the failure of synergy in learning; they fail to come up with a creativity idea, conduct user research, create a business plan, and build the world of innovation. Since then, there have been global changes around the world. Every year, firms try to build a mobile application, update the existing application, and introduce new products and technology without training employees to work perfectly well on using the new ideas, products, processes, technology, and services. Most of the employees under the technology orientation of the new invention need help to cope and adapt to changes in technologies that have affected the future performance of innovation of the organization (Ota *et al*., 2013).

Technological innovation in hotels has been affected by organizational change, organizational commitment, organizational culture, inefficiency, incompetency, managerial instability, lack of resources, lack of support lac, lack of capabilities, and insufficient funds. These factors influence organizational outcomes and performance. Furthermore, managers are not associated with changes such as setting directions, making decisions, coordinating activities, and motivating employees through training, manifested by new technology practices, processes, and structured innovation (Pokharel & Choi, 2015). Against this backdrop, this study seeks to investigate the implication of technological innovation on organizational performance.

Technological Innovation

Technological innovation refers to "the implementation of an idea for a new product or service or the introduction of new elements in an organization's production process or service operation." However, Prahalad and Hamel (2011) stated in their study that material technologies are applied to solve organizational technological issues. For instance, to develop an application, a firm can create generic tasks and resources to proceed with the application. The technological trajectory is also considered a possible direction of a technology tool that helps build a technological paradigm. We favor the phenomenon that technological innovation leads to sustainability and, in turn, creates superior performance. In the modern business world, technological innovation has become a central focus of top management in various organizations. In strategic management literature, particularly from an RBV perspective, a firm with unique resources and capabilities can achieve a sustainable competitive position in a turbulent market and outperform its closed competitors and industry rivals.

Technological innovation helps firms produce various new products and services, which are important for high performance and profits. In a turbulent market, those firms become market leaders and gain high profitability, with high informational and technological capabilities. Particularly in emerging markets, a firm's goal of high profit can be gained through technological innovation. Technological innovation enables firms to become industry leaders in an uncertain environment and easily seize market profit (Becker & Egger, 2013). On the other hand, having little or no technological innovation can attenuate firms to increase their sales growth effectively. Technological innovation is feasible in a particular industry, and various sectors, such as manufacturing and services, increase their performance by adopting technological innovation. Compared to non-technological innovation, technological innovation has a more significant influence on firm performance and success. Technological innovation is considered an important driver that significantly contributes to firm performance. The interest in the technological innovation process continues in response to capitalizing on the tremendous opportunities new technologies offer. Nnadi-Nicholas. et al. (2023) posited that management should relook at the goal settings that will carry out the strategy-relevant technologically innovative activities and the degree of cooperation and commitment among functional departments of the organization to enhance performance. It is now well acknowledged that technological innovation is a complex process, and many actors play a role. The presence of the various actors and champions is necessary for innovative output but not sufficient. Questions of organizational integration, environment assessment, and the development of technological capabilities are crucial to the process (Bogers, 2009).

Factors Affecting Technology Innovation

Technology:

Technology is often discussed as an innovation output, and we are concerned with its influence. Technology is concerned with utilizing technology to facilitate innovation and innovative behavior within and between organizations.

Innovation Process:

Although a few authors discuss the impact of operational processes on organizational innovativeness, innovation processes relate to the generation, development, and implementation of innovations.

Corporate Strategy:

Strategy refers to aspects of the corporate and innovation strategies of the organization and how they impact the management of innovation. It also refers to disseminating the strategic vision throughout the organization (Mothe & Nguyen-Van, 2015).

Organizational Structure:

Organizational structure has received much attention in the general management literature and often covers more than the simple configuration of the organization. However, within this research, organizational structure relates to how the various parts of an organization are configured and how this impacts an organization's ability to manage innovation(Mothe& Nguyen-Van, 2015).

Organizational Culture:

Culture here refers to the organization's culture; in the context of this research, it relates to the values and beliefs of the organization and how this impacts the ability to manage innovation within the organization. It considers the organization's approach to collaboration, communication, and risk (Ogbonna & Harris, 2000).

Employee:

Employee refers to the organization's non-management employees and their role in affecting innovation management. This factor considers the various personal characteristics associated with employees and the motivation of employees to become innovative (Ogbonna & Harris, 2000).

Resources:

It relates to all the organization's human, financial, and physical resources. However, they discuss the level of slack resources and how resources are managed to impact an organization's ability to manage innovation.

Knowledge Management:

Knowledge management refers to the management and utilization of knowledge for innovation management. This covers all aspects of the organization's internal and external knowledge. This factor will also consider organizational learning as it plays a key role in knowledge management.

Management Style and Leadership:

Management style and leadership refer to the employees responsible for the organization's management. This factor is concerned with several aspects of how management influences innovation management. For example, it considers the management style within the organization and how management can motivate employees to become more innovative (Ota *et a*l., 2013).

Theoretical Framework

Actor-Network Theoryby Latour (1997)

Actor-network theory (ANT) by Latour (1997) and Callon (1999) posited that a heterogeneous network of humans and non-humans are equal interrelated actors. It strives for impartiality in describing human and non-human actors and the reintegration of employees and management. For example, Latour (1992) argues that instead of worrying whether we are anthropomorphizing technology, we should embrace it as inherently anthropomorphic: technology is made by humans, substitutes for the actions of humans, and shapes human action to achieve a purpose individually and collectively. What is important is the chain and gradients of actors' actions and competencies and the degree to which we choose to have figurative representations. Key concepts include the inscription of beliefs, practices, and relations into technology, which aid in improving organizational productivity.

Theory of Reasoned Actionby Martin Fishbein and Icek Ajzen in 1967

The Theory of Reasoned Action by Martin Fishbein and Icek Ajzen in 1967theorizes that a person's attitude toward a behavior is determined by their salient beliefs about the consequences of performing the behavior and an evaluation of the outcome of that behavior. Subjective norms are also a function of beliefs, but beliefs of a different kind, namely the person's beliefs that specific individuals or groups think they should or should not perform the behavior. Individuals are more likely to perform an act if they perceive the existence of greater social pressure from salient referents to perform that act. The Technology Acceptance Model postulates that two particular beliefs, perceived usefulness and perceived ease of use, are of primary relevance for computer acceptance behaviors. TAM proposes that behavioral intentions determine computer usage. However, it differs from TRA in that behavioral intention is jointly determined by the person's attitude toward using technology and its perceived usefulness. TAM does not include TRA's subjective norms as determinants of behavioral intention since this is one of the least understood aspects of TRA. This study seeks to develop an innovation adoption model combining multiple sets of factors found in previous models to examine a broader perspectivethat will help understand individuals' adoption of innovation.

METHODOLOGY

In this research work, the researcher made use of descriptive design to determine the factors responsible for the implications of technology innovation on organizational sustainability.Collected for this study were sourced mainly from ques**tion**naires administered to 140 Mouka Foam Company Ltd and Starline Company staff members in Abia State. Analytically, the study employed descriptive and inferential statistics, such as simple regression techniques, to test the dependent and independent variables.

RESULTS AND DISCUSSIONS

Technology innovation does not significantly impact the performance of Selected private firms in Abia State.

Regression model on technology innovation on performance

Variable	Parameters	Coefficient	Std error	t – value	P-value
Constant	β_0	0.074	0.069	1.072	.000
Technology innovation (X_1)	β_1	0.089	0.067	1.328**	.001
R-Square		0.689			
Adjusted R – Square		0.580			
F – statistics		10.224***			

Source: Field Data, 2023

The table above shows the coefficients of technology innovation on performance. The coefficient of multiple determination (R^2) was 0.689, which implies that changes in the independent variable explained 68.9% of the variations in dependents, while 31.1% were unexplained by the stochastic variable, indicating goodness of fit of the regression model adopted in this study, which is statistically significant at 1% probability level. The coefficient of technology innovation and socialite was statistically significant and positively related to performance at a 5 percent level (1.328**). P-value = .001 < .05% significance level. This implies that technological innovation significantly impacts the performance of Selected private firms in Abia State.The majority of the respondents strongly agreed that organizational skills enhance employee performance, Organizational knowledge enhances employee commitment, and Organizational attitudes relate to organizational ethics. This finding is in collaboration with the findings of Becker and Egger (2013). They revealed factors affecting the adoption of technological innovation (firm's external potential sourcing and networking, firm-specific characteristics, and firm's environmental condition) and technological innovation and firm performance.

CONCLUSION AND RECOMMENDATIONS

The study stated that technological innovation significantly impacts the performance of Selected private firms in Abia State. Innovation involves the desire to adopt new ideas; this implies that innovation culture significantly impacts market share. Managers should, therefore, create and promote the eagerness to learn among their employees so that they develop new skills and share existing knowledge. In conclusion, technological innovation is a transformative force that can reshape societies, economies, and the global landscape. The study concluded that factors affecting technology innovation have an effect on organizational performance.Policymakers, industry leaders, and communities must collaborate to harness the benefits while addressing the challenges posed by cutting-edge technologies.

The study, therefore, recommends that Organizations adopt new ideas, services, and products according to the learning carried out to study changes in the taste and fashion of the customers in the business environment to meet consumer.

Furthermore, firms should ensure that they adapt to the changes in technology and innovation by implementing and collaborating on ideas, products, services, and attitudes on organizational learning.

Policy Implications

Governments should establish flexible and adaptive regulatory frameworks that can accommodate the rapid pace of technological change. Regulations should be designed to ensure the safety, security, and ethical use of emerging technologies without stifling innovation.

Policymakers should prioritize and increase funding for R&D initiatives across various sectors. Investing in basic research and applied technology development helps maintain a competitive edge and drive economic growth.

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KNOWLEDGE ADVANCEMENT: A PANACEA TO ENHANCE ORGANIZATIONAL PERFORMANCE OF SELECTED TERTIARY INSTITUTIONS IN ABIA STATE, NIGERIA.

Omeonu, Obioma M., Emen, Monday S., Unachukwu, Larry C. and Emerole, Gideon A.
Michael Okpara University of Agriculture, Umudike
Corresponding author: omeonuobioma1@gmail.com

ABSTRACT
This study focused on knowledge advancement: A Panacea to enhance the organizational performance of selected tertiary institutions in Abia State, Nigeria. The specific objective is to examine the effect of knowledge adoption on employee effectiveness in the selected tertiary institutions in Abia State, Nigeria. A survey design was adopted. This study adopted both primary and secondary data. The study adopted a stratified sampling method to obtain a sample of three hundred and eighteen (318) staff. ANOVA was used to test the hypotheses of the study. Findings revealed that knowledge adoptionsignificantly affects employee effectiveness in the selected tertiary institutions in Abia State, Nigeria. The study concluded that there is a positive effect on knowledge advancement and development on organizational performance in selected tertiary institutions in Abia State, Nigeria. The study recommended that organizations embrace knowledge adoption strategies to enhance employee efficiency and performance and thus add profitable outcomes to the organization.
Keywords: Knowledge Advancement, Knowledge Adoption, Employee Effectiveness, Organizational Performance

INTRODUCTION
Advancement in knowledge refers to the achievement of relevant skills or the provision of necessary knowledge for employees to perform specific tasks to achieve a common goal. It yields definite outcomes, which include improved staff competency and capacity for performance. An organization may find it challenging to maintain competent staff in its payroll if the training and development of its workforce is not made available or considered a priority. This will ultimately hinder the achievement of organizational goals and objectives (Elnaga & Imran, 2013). Nevertheless, the most important roles of the tertiary institutions system in any society include teaching, the development of new knowledge, research work, and community services, and these can only be achieved with proper planning of human resource development. However, new employees are often uncertain about their roles and responsibilities. Hence, job demands and employees' capabilities must be balanced through human resource advancement and development because building a solid staff program influences the realization of the tertiary institution's mission statement (Sultana *et al.*, 2012).

Therefore, development efforts enable organizations to assume these roles and greater responsibilities. Employee development improves the skill of the individuals in the said role and prepares them for future responsibility while development pays dividends to the employee and the organization; the personal and career goals of the staff are advanced, adding to their abilities and values to the employer, which further the achievement of the tertiary institutions' goals and objectives (Martin, 2015). The author continued that knowledge advancement and development are crucial strategies to improve workforce performance. Improved capabilities, knowledge, and skills of the talented workforce have proven to be a major source of capacity building for human resources for organizational performance and competitive advantage in a global market. Developing employees' desired knowledge, skills, and abilities to perform well on the job requires effective training programs that may also affect employee motivation and commitment (Elnaga& Imran, 2013).

Indeed, knowledge is not static but dynamic. Hence, knowledge acquired today can become obsolete tomorrow. Hence, to recharge the staff's intellectual battery with new electrolytes of knowledge and ideas, new skills and abilities that ensure improved organizational performance, knowledge advancement, and development become imperative. On this premise, the study looks into the effect of knowledge advancement on the organizational performance of selected tertiary institutions in Abia State, Nigeria (Beardwell, 2011).

Tertiary institutions are designed to act as gateways of knowledge, but evidence shows low-quality teaching and a lack of knowledge advancement. Thus, tertiary institutions in Nigeria should be able to

develop the skills required to effectively embark upon and complete important tasks, understand and explain various aspects of society or nature, provide solutions to the social and natural problems that impinge on human well-being in the immediate workplace environment and globally (Ajayi, 2009).

Several factors converge as bottlenecks hindering the effective and efficient performance of Nigerian tertiary institutions, and they are as follows: Government and regulators, government inadequate budgetary allocation (underfunding): Over the years, the government has grossly underfunded education to the extent that their effort falls far below the UNESCO recommended annual budget proportion of 26%. Reports show that the education budget, as a proportion of total federal spending, is about 7.6% (average from 2008-2010). It is 5% of the total federal capital budget and 11% of the total recurrent budget. Unfortunately, in Nigerian tertiary institutions, there is a discontinuity in national policy between one political dispensation and the other (Zahra & George, 2007). There are, therefore, many abandoned projects. In some other cases, lobbying and the influence of political heavyweights and influential traditional rulers make the government backpedal on enunciated policies. This paper, therefore, aims to find out the importance of knowledge for a new Nigerian economy, the key problems facing tertiary education, and to highlight policy prescriptions that will allow the country to take advantage of the opportunities available to bring about improvement in the standard of tertiary education in order to move toward a knowledge economy. Based on the above highlights, the researcher deemed it useful to evaluate the effect of knowledge advancement on employee effectiveness

REVIEW OF LITERATURE

Knowledge Advancement

Knowledge advancement or training is a fundamental principle of competitive advantage that has been emphasized in strategic management. To achieve sustainable competitive advantage, an organization should realize how to create, distribute, and utilize knowledge; hence, organizations need knowledge acquisition. Based on the definition of Knowledge Management (KM) by Darroch (2007), knowledge advancement is one of the dimensions of KM. Since KM is a process that transforms individual knowledge into organizational knowledge, the dimensions of KM allow organizations to learn, reflect, unlearn, relearn, build, maintain, and replenish their core competencies (Rahimli, 2012). Knowledge advancement is obtaining knowledge externally or internally and making it appropriate for succeeding use (Holsapple, 2006). Hence, the knowledge generated externally will serve as the firm's competitive advantage. The acquired knowledge will be combined with the existing knowledge to create new knowledge, for instance, new processes (Aranda & Molina-Fernandez, 2007).

Almulhim (2020) opined that knowledge advancement/training and creation occur when individuals engage in practical activities through participation in social practices under the guidance of individuals who are more experienced than them. Moreover, the importance of a mentor in an organization with much tacit knowledge and who guides the newcomer in learning this tacit knowledge via practice is vital. Again, knowledge created and acquired from diverse assets inside and outside an organization could be more effective if converted into a gainful, practicable structure. Knowledge advancement is a complementary capability that enhances a firm's absorptive capability to identify and acquire external information critical to its operations (Zahra & George, 2007). A firm's absorptive capacity is critical to its innovative capacity. Absorptive capacity is the organization's ability to recognize the value of new, external information, assimilate it, and apply it to commercial ends (Zahra & George, 2007). The author stated further that absorptive capacity is a dynamic capacity that pertains to knowledge creation and utilization that enhances the organization's ability to gain and sustain a competitive advantage.

According to Darroch (2007), knowledge advancement relates to the location, creation, or discovery of knowledge. The new knowledge of an organization must either be invented internally or acquired from external sources. There are many sources of knowledge, both internal and external, for an organization. Internally, employees' capabilities, skills, and experiences must be discovered and exploited. Also, the analysis and understanding of various internal data and information are vital sources of knowledge that can be exploited.

In the same way, externally, customers and channel members have knowledge that needs to be acquired by the organization for decision-making. Knowledge can also be acquired from other members of the external environment, like competitors and the public (Petruzelli *et al.*, 2009). This information is required if an organization wants to develop a sustainable competitive advantage leading to superior market performance. Knowledge about customers, markets, and other relevant factors of influence allows faster utilization of opportunities and more flexible reactions to threats. Thus, through superior knowledge, companies can accomplish their goals faster, cheaper, and at higher quality than their competitors.

Knowledge advancement/training is the methodical gaining and improving knowledge, skills, and behaviors imperative for employees to complete their job responsibilities or perform better in their work environment. Based on various other studies, training can also be interpreted as intentionally improving attitude, knowledge, or skill via learning to attain improved performance in a specific task or a variety of tasks (Beardwell, 2011). Its major goal is to improve individual competencies and to be equipped to meet the current and future needs of the organization.

Knowledge acquisition

Knowledge management procedures identified with acquiring knowledge are those identified with getting information. Achieve, seek after, produce, develop, catch, and coordinate are shared terms used to depict the process of knowledge acquisition. Creating new knowledge to learn existing information is a part of knowledge acquisition and prompts advancement. Development requires joint exertion and remarkable expertise in knowing and securing new learning. The practice includes the occasions of agreeability and collection of learning. It portrays how learning is achieved from various sources inside and outside the association. According to Zahra and George (2002), knowledge acquisition remains for authoritative practices went for collecting data from extra-organizational sources. External networks and collaborative arrangements are crucial sources of knowledge for a wide range of organizations. Clients frame a particularly imperative gathering from which knowledge should be gained if the organization succeeds. For example, customer feedback systems, data mining, business intelligence, and collaboration with partners and research institutions are typical of highly developed knowledge acquisition practices. Knowledge acquisition is a continuous and dynamic process. Knowledge acquisition includes devising original thoughts, bits of knowledge, and arrangements and linking them inside the organization.

Theoretical Framework

Acquired Needs Theory (David McClelland, 1961)

David McClelland, a well-known psychologist at Harvard University, built on this work in his 1961 book, "The Achieving Society. The psychologist studied employee behavior and used the Thematic Apperception Test (TAT) to measure employee motivation in satisfying various needs and found out that employees craved the need for achievement, power, and affiliation. The Acquired Needs Theory focuses on the diversity of people and is rooted in culture. It assumes that needs are acquired or learned based on our life experiences. A strong need will motivate the person to engage in behavior that satisfies that need. Achievement is represented by the drive to excel and accomplish challenging tasks to achieve a standard of excellence. Achievement motivation depends on childhood, personal and occupational experience, and even the type of organization. According to this theory, some people have a compelling drive to succeed. They strive for personal achievement rather than for the rewards of success. They have a strong desire to do something better or more efficiently than it has been done before. Individuals high on achievement needs often make good entrepreneurs running their businesses.

The study was narrowed down to examine the effect of knowledge advancement and development. There are few studies by different scholars and researchers onknowledge advancement.However, none of these studies was carried out using selected tertiary institutions in Abia State to ascertain the effect of knowledge creation on employee performance,examine the effect of knowledge adoption on employee effectiveness, and determine the relationship between technology-based learning and organizational performance in the selected tertiary institutions in Abia State, Nigeria. Hence, to fill the gap in this literature, this study seeks to examine the effect of knowledge advancement and development on organizational performance using selected tertiary institutions in Abia State, Nigeria.

METHODOLOGY

A survey design was adopted to obtain accurate data based on the opinions of the respondents, and the researcher used primary data from a questionnaire.This study adopted both primary and secondary data. The target population comprises one thousand five hundred and fifty-one (1551) obtained from Abia State Polytechnic and Clifford University in Abia State, Nigeria. The sample size was three hundred and eighteen (318) staff derived statistically from Taro Yamane (1964). A stratified sampling method was adopted, giving the employees an equal chance of being selected. Quantitative data was analyzed using descriptive analysis in the form of percentages and frequencies. The Social Package for Statistical Science (SPSS) software version 23 aided in data analysis, while ANOVA was used to test the dependent and independent variables.

RESULTS AND DISCUSSIONS

Table 1: Return of Questionnaire

Selected Tertiary Institutions	Questionnaire Administered	% Administered	Questionnaire Lost	% Lost	Questionnaire Retrieved	% Retrieved
ASPOLY	272	85.5	81	25.5	191	60.1
CU	46	14.5	8	14.5	38	11.9
Total	318	100	89	40.0	229	72.0

Source: Field Survey, 2023

A total of 318 questionnaires were administered to the selected tertiary institutions in Abia State, Nigeria. Eighty-nine questionnaires were lost with a percentage ratio of 40.0%, while the questionnaire retrieved was 229 with a percentage ratio of 72.0%, and this formed the basis of the study.

Table 2: Examinethe effect of knowledge adoption on employee effectiveness in the selected tertiary institutions in Abia State, Nigeria. ***n=229***

RESPONSES	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN
Legitimate and valid informationboosts employee effectiveness	112	79	11	13	14	949	4.1
Information credibility increases employees' productivity	107	87	9	14	12	950	4.1
Reliable information improves employee performance	109	86	8	12	14	951	4.2
Availability and accessibility of information enhance employee performance	103	96	10	11	9	960	4.2

Source: Field Survey, 2023

The table above shows the effect of knowledge adoption on employee effectiveness in the selected tertiary institutions in Abia State, Nigeria. The majority of the respondents agree that Availability and accessibility of information enhance employee performance (x=4.2), Reliable information improves employee performance (x=4.2), Information credibility increases employees' productivity (x=4.1), and Legitimate and valid information boosts employee effectiveness (x=4.1). Therefore, the mean of all the responses is≥ 3.5; this shows thatknowledge adoption positively affects employee effectiveness. Thus, many companies are thinking of knowledge and expertise as 'intellectual capital' and invest heavily in adopting and developing knowledge management systems for creating, storing, sharing, and applying knowledge inside the organization to achieve higher performance.

$H0_{1:}$ Knowledge adoptiondoes not significantly affect employee effectiveness in the selected tertiary institutions in Abia State, Nigeria.

Table 3: ANOVA TABLE on Knowledge adoptionand employee effectiveness Coefficient Table[a]

Model	Sum of square	d.f	Mean square	F. cal	F- tabs
Regression	1.1622	1	1.1622	21.5222	1.52
Residual	12.3114	228	0.0540		
Total	13.4736	229			

Source: Field Survey, 2023

Note: If F-cal>F tab, Reject the null hypothesis; otherwise, reject the alternate hypothesis. The result from the ANOVA table showedknowledge adoptionand employee effectiveness. We accept the alternate hypothesis that the regressed equation is significant; the F-cal value was 21.5222 while the F tabulated value was 1.52 at .002 < .05% significance level. This means that F-cal was greater than F-Tab. So, the null hypothesis is rejected, and the alternate is accepted. Therefore, knowledge adoptionsignificantly affects employee effectiveness in the selected tertiary institutions in Abia State, Nigeria.

The majority of the respondents agree that Availability and accessibility of information enhance employee performance, Reliable information improves employee performance, Information credibility increases

employees' productivity, and Legitimate and valid information boosts employee effectiveness. Therefore, this shows thatknowledge adoption positively affects employee effectiveness. Thus, many companies are thinking of knowledge and expertise as 'intellectual capital' and invest heavily in adopting and developing knowledge management systems for creating, storing, sharing, and applying knowledge inside the organization to achieve higher performance.

CONCLUSION AND RECOMMENDATIONS

The study examined Knowledge Advancement: A Panacea to Enhance the Organizational Performance of Selected Tertiary Institutions in Abia State, Nigeria. Given this, the top management should employ and establish various ways to acquire and advance knowledge, ICT systems, skilled knowledge, and all other relevant knowledge management resources that will further help to enhance knowledge advancement. At every point, effortsshould be made to acquire modern and latest systems and improve employees' skills through training and retraining. Again, a cordial relationship between employers/employees and the general public should be encouraged to ensure the free flow of relevant information/knowledge from the public to the organization. The study concluded that there is a positive effect on knowledge advancement and development on organizational performance in selected tertiary institutions in Abia State, Nigeria.
Therefore, organizations should embrace knowledge adoption strategies to enhance employee efficiency and performance and thus add profitable outcome. They should have a properly laid down employee knowledge adoptionprogram that will enhance employee performance and thus increase the levels of task performance.

Policy Implications

Organizations should encourage open access to research findings and knowledge. This can involve supporting open-access publishing and data-sharing initiatives and promoting transparent dissemination of information to facilitate collaboration and accelerate the pace of discovery.
Firms should facilitate knowledge transfer from academia to industry by implementing policies that encourage technology transfer and commercialization of research outcomes. This can involve creating technology parks, providing intellectual property support, and fostering collaborations between research institutions and businesses.

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SUB THEME
MADE IN NIGERIA AFCFTA AND OPPORTUNITIES FOR SMES

AFCFTA-PANACEA FOR ENDOGENOUS AFRICAN BUSINESS AND ECONOMICDEVELOPMENT

[1]Ikonne, Ugwueze O. and [2]Egbegbadia, Ejiro .
[1]Department of Marketing, Abia State Polytechnic, Aba, Abia State
[2]Edwin Clarke University, kiagbodo-Ugheli. Delta state
Corresponding author: orasicom@yahoo.com,ikonneugwueze80@gmail.com

ABSTRACT
This paper looked at the effect of Integration as an instrument of encouraging efficiency and economic development in the continent and how endogenous African business can compete favourably in the global market. The paper examined AfCFTA as an instrument of integration to boost continental business and also looked at the objectives, organizational structure, Implementation, prospects and challenges of AfCFTA. The paper employed Doctrinal Research Methodology which involves analysis of case laws and statutory provisions. It also involves an inquiry into conceptual basis of legal rules, principles and doctrines. Our observation shows that AfCFTA as an integration body will foster and boost intra-African trade, investment and employment in the intermediate term. The paper concludes that AfCFTA is more than a trade agreement as it is an instrument for Africa's economic development by driving continental integration. It is recommended that states must work to improve infrastructure especially those that will improve and aid mobility of people and goods. Visa restrictions should be relaxed to encourage easy movement without the usual encumbrances observed in African continent.
KeyWords: AfCFTA, Integration, Endogenous Business, Intra-African trade, Economic Development

INTRODUCTION

The world has moved beyond the stage where nations are isolated and as the doctrine of non-interference and sovereignty have now assumed global, regional and sub-regional dimensions. During the colonial period, nationalism in most African states was largely confined to the territorial boundaries of each colonized state. The Independence of the states that came through those nationalistic movements was essentially state-based. At Independence therefore, African states initially directed their attention to the development of their individual states. However, the African states soon realized necessity for interaction, cooperation and collaborative efforts among themselves. But gradually, there began to emerge substantial number of bilateral and multilateral treaties which tends to bring about deeper continental cooperation and not outright integration between the contracting states. Integration moved beyond human rights to globalisation which refers to a dynamic and multidimensional process of economic integration whereby national resources become more and more internationally mobile while national economies become increasingly interdependent (Delombaerde & Leliolapadrel, 2008).

Integration is the unity in working relationships of autonomous political entities for some benefits such as economic, political, security, geographical and environmental. Integration is usually aimed at strengthening the integrating units, this is however only possible where the federating units are willing to give up some of their sovereign powers and become subject to another jurisdiction of authority.This has been the bane of most integration efforts.

Integration in Africa

African continent is made up of States with differences along religious, political structures, economic potentials, colonial experiences, cultural and social practices. It is therefore necessary to harness areas of common interest and oneness for the purposes of unity, development and competitiveness in the global market. The Economic Commission for Africa (ECA) established by the UN became the champion of regional integration in the mid-1960s and proposed division of Africa into regions for the purposes of economic development.

The early integration efforts in Africa were mainly political and were based on the struggle against colonialism. In the late 50s to early 60s two major groups of alliances emerged - The Casablanca Group and the Monrovia Group.

The Casablanca Group made up of Algeria, Egypt, Ghana, Guinea, Libya, Mali and Morocco advocated for a united Africa based on Pan-Africanism, that is the political unification of Africa into a federation. They advocated for a significant integration as existed in Europe through the European Union (EU), which would help African States defeat colonialism, achieve peace, foster cultural dialogue, increase the

continent's geopolitical influence and promote economic development. By this Ideology significant powers of national government would be transferred to a supranational superior authority.
The Monrovia Group was made up of moderates who shunned extremism of sacrificing significant national powers for African wide government or union. It stressed the need for the newly independent African states to retain their autonomy and strengthen their own economies, governments, military etc.
The integration efforts of these groups culminated in the establishment of the Organisation of African Unity (OAU) in 1963 which later metamorphosed into the African Union (AU) in the year 2000. The OAU adopted the principles of non-interference and national sovereignty of the Monrovia Group. Just like at the international level, the initial effort of integration was in the area of Human Rights which brought about the adoption of the African Charter on Human and Peoples Rights in 1981and other human rights instruments and Protocols.
Africa ranks near the bottom when it comes to competing in the global economy, held back by fragmented markets that inhibit efficiency and constrain economic growth and integration was therefore imperative. The goal of the AU was to accelerate the "economic integration of the continent". A second goal was to "coordinate and harmonize the policies between the existing and future Regional Economic Communities for the gradual attainment of the objectives of the Union."
Another landmark in African integration was the adoption of the Abuja Treaty in 1991, which created the African Economic Community, an organization that promoted the development of free trade areas, customs unions, an African Central Bank, and an African common currency union (UNCTAD, 2016).
With the Treaty of Abujain 1991, the Member States of the Organization for African Unity (OAU) agreed on a roadmap for the creation of a common African market .To accelerate the implementation of the Treaty and strengthen regional integration, the African Union (AU) Trade Ministers agreed to establish an African Continental Free Trade Area (AfCFTA).
In 2012, African Heads of State and Government at the African Union summit in Addis Ababa, recognizing that 'the promotion of intra-African trade is a fundamental factor for sustainable economic development, employment generation and effective integration of Africa into the global economy', decided to establish the Continental Free Trade Area (CFTA) by 2017. At the 2015 AU summit in Johannesburg, the summit agreed to commence negotiations. This began a series of ten negotiating sessions which took place over the next three years. On 21 March 2018, at the 10th Extraordinary Session of the African Union on AfCFTA, the African Continental Free Trade Agreement, the Kigali Declaration; and the Protocol on Free Movement of Persons. The Protocol on Free Movement of Persons seeks to establish a visa-free zone within the AfCFTA countries, and support the creation of the African Union Passport. At the summit in Kigali on 21 March 2018, 44 countries signed the AfCFTA, 47 signed the Kigali Declaration, and 30 signed the Protocol on Free Movement of People. While a success, there were two notable holdouts: Nigeria and South Africa, the two largest economies in Africa (Shaban, 2018).

AFRICAN CONTINENTAL FREE TRADE AREA (AfCFTA)

Trade integration across the African continent has long been limited by outdated border and transport infrastructure and a patchwork of differing regulations across dozens of markets. Governments have often erected trade barriers to defend their markets from regional competition, making it more expensive for countries to trade with near neighbours than countries much further afield and even outside Africa. Intra-African exports were 16.6% of total exports in 2017, compared with 68.1% in Europe, 59.4% in Asia, 55% in America and 7% in Oceania, according to UNCTAD. Intra-African trade, defined as the average of intra-African exports and imports, was around 2% during the period 2015–2017 (David, 2022).

Legal Framework

The African Continental Free Trade Area (AfCFTA) is a free trade area encompassing most of Africa. It was established in 2018 by the African Continental Free Trade Agreement, which has 43 parties and another 11 signatories, making it the largest free-trade area by number of member states, after the World Trade Organization, and the largest in population and geographic size, spanning about 1.3 billion people across the world's second largest continent (Crabtree, 2018).
The AU Constitutive Act 2000 is also relevant to the establishment operation and implementation of AfFCTA. Conventions and other instruments and Protocols such as the AU Charter, African Charter on Human and Peoples Rights, Convention on Cross-Border Cooperation 2014 and ConventionontheAfricanEnergyCommission2001 are also important. The Protocols on Trade in Goods, Trade in Services and Rules and Procedures on the Settlement of Disputes provide relevant laws for the implementation and operations of AfCFTA.The Marrakesh Agreement Establishing the World Trade Organization of 1994 is also relevant.

The Agreement was set to come into force 30 days after ratification by 22 of the signatory states. According to The Economist (2018)·the Saharawi Republic made the 22nd deposit of instruments of ratification, bringing the agreement into force on May 30; it entered its operational phase following a summit on 7 July 2019, and officially commenced 1 January 2021 (African Union, 2019)

Membership

Among the 55 AU member states, 44 signed the African Continental Free Trade Agreement (consolidated text), 47 signed the Kigali Declaration and 30 signed the Protocol on Free Movement of People at the end of the 2018 Kigali Summit. Benin, Botswana, Eritrea, Guinea-Bissau, Nigeria, and Zambia were among the 11 countries that did not initially sign the agreement (Uwiringiyimana, 2018). After the 2018 Kigali summit, more signatures were added to the AfCFTA. At the 31st African Union Summit in Nouakchott on 1 July 2018, South Africa (the second largest economy of Africa), Sierra Leone, Namibia, Lesotho and Burundi joined the agreement. In February 2019, Guinea-Bissau, Zambia and Botswana also joined. Kenya and Ghana were the first nations to ratify the agreement, depositing their ratification on 10 May 2018.

President of Nigeria Muhammadu Buhari was reluctant to join the AfCFTA, fearing it would hurt Nigerian entrepreneurship and local industries, (Giles, 2018) and his decision not to was praised by some local groups including the Manufacturers Association of Nigeria (Mumbere, 2018)and the Nigeria Labour Congress. The Nigerian government intended to consult further with local businesses in order to ensure private sector buy-in to the agreement, because a key concern was whether the agreement adequately prevented anti-competitive practices such as dumping In July 2019, just months after being re-elected to a new term, Buhari agreed to adhere the Africa free trade at the 12th extraordinary session of the assembly of the union on AfCFTA(Kazeem, 2019).

As of May 2022, there are 54 signatories, of which 43 (80%) have deposited their instruments of ratification(TRALAC, 2020). Additionally, one country (Somalia) has completed its domestic ratification, but not yet deposited their ratification with the depository. Eritrea is the only AU member state which has not signed the agreement.

Objectives of AfCFTA

The general objective of AfCFTA is to develop a single market for goods and services facilitated by movement of persons in order to enhance economic integration of the African continent in accordance with the Pan African Vision of "An Integrated, prosperous and peaceful United Africa" as enshrined in Agenda 2063.

1. To create a liberalized market for goods and services through successive rounds of negotiations
2. Contribute to the movement of capital and natural persons and facilitate investment building on the initiatives and developments in state parties and RECs,
3. Lay the foundation for the establishment of a continental Custom Union at a later stage,
4. Promote and attain sustainable and inclusive social economic development, gender equality and structural transformation of State parties,
5. Enhance the competitiveness of economies of State parties within the continent and global market,
6. Promote industrial development through diversification and regional value chain development agricultural development and food security and food security
7. Enhance the competitiveness of the economies of State Parties within the continent and the global market;
8. Resolve the challenges of multiple and overlapping memberships and expedite the regional and continental integration processes (ITC, 2018).

The means and principles for the realization of the above objectives shall be driven by member States of AU, RECs, FTAs, transparency, disclosure of information, flexibility, special and differential treatment, preservation of the most favoured nation(MFN) treatment and reciprocity.

To achieve the above purposes State parties are enjoined to:

Progressively eliminate Tariff and non-tariff barriers to trade in goods

Progressively liberalize trade in services

Cooperate on investment, intellectual property rights and competition policies

Cooperate in all trade related areas

Cooperate on customs matters and the implementation of trade facilitation measures

Establish a mechanism for the settlement of disputes concerning their rights and obligations

Establish and maintain an institutional framework for the implementation of AfFCTA.

Organisational Structure of AfCFTA

The following institutions were established to facilitate the implementation of the free trade area. As a result of Phase II negotiations more committees may be established via protocols.

The Assembly

This is the highest decision-making organ and is made up of Heads of State. It provides oversight and strategic guidance on AfCFTA including the action plan for Boosting Intra-African Trade (BIAT).

The Council of Ministers

It is made up of Ministers of Trade of state parties. Its function is to implement and enforce the Agreement. It reports to the Assembly through the Executive Council and its decisions are binding on State parties.

The Committee of Senior Trade Officials

This is composed of permanent or principal secretaries of member states and is responsible for the development of programmes and action plans for the implementation of the Agreement.

The Secretariat

This is the administrative hub of the organisation and is established by the Assembly. The AfCFTA Secretariat will be responsible for coordinating the implementation of the agreement and shall be an autonomous body within the AU system. Though it is an autonomous body within the African Union with an independent legal personality, it shall work closely with the AU Commission and receive its budget from the AU. The AfCFTA Secretariat – is located in Accra, Ghana. The Secretariat is headed by a Secretary General, H.E. Mr. WamkeleMene was officially appointed the first Secretary General of the Secretariat on 19 March 2020. The AfCFTA Secretariat was officially handed over in Accra, Ghana on 17 August 2020.

Several committees have been established, for trade in goods, trade in services, on rules of origin, trade remedies, non-tariff barriers, technical barriers to trade and on sanitary and phytosanitary measures. Dispute resolution rules and procedures are still being negotiated, but will presumably include designation of a dispute resolution body.African Continental Free Trade Area.

Implementation

The AfCFTA is set to be implemented in phases, and some of the future phases still under negotiation. (locit) Phase I covers trade in goods and trade in services. Phase II covers intellectual property rights, investment and competition policy. Phase III covers E-Commerce.

At the 2018 Kigali summit, areas of agreement were found on trade protocols, dispute settlement procedures, customs cooperation, trade facilitation, and rules of origin. There was also agreement to reduce tariffs on 90% of all goods. Each nation is permitted to exclude 3% of goods from this agreement. This was part of Phase I of the agreement, which covers goods and services liberalization. Some Phase I issues such as the schedule of tariff concessions and other specific commitmentsthat remain to be negotiated (Landry &VanderVen, 2019).

The 12th Extraordinary Session of the African Union on AfCFTA was called to launch the new agreement into its operational phase, which was hosted in Niamey on 7 July 2019. At its launch, five operational instruments that will govern the AfCFTA were activated: "the rules of origin; the online negotiating forum; the monitoring and elimination of non-tariff barriers; a digital payment system; and the African Trade Observatory."

Phase II and III negotiations are expected to be initiated by all AU member countries and held in successive rounds. In February 2020, the AU Assembly of Heads of State and Government decided that Phase III would begin immediately following the conclusion of Phase II negotiations, which were initially scheduled to conclude in December 2020. However, this deadline was delayed due to the COVID-19 pandemic in Africa, and a new date (December 31, 2021) was set as the deadline for the conclusion of Phase II and III negotiations. The AfCFTA officially but largely symbolically launched on January 1, 2021.

AfCFTA AS AN INSTRUMENT OF INTEGRATION

According to an analysis by the World Bank, in the policy areas already covered by subregional preferential trade areas (PTAs), such as the Common Market for East and South Africa (COMESA), the East African Community (EAC), the Economic Community of West African States (ECOWAS), and the South African Development Community (SADC), the AfCFTA offers a common regulatory framework, reducing market fragmentation created by different sets of rules.

Secondly, the AfCFTA will be an opportunity to regulate policy areas important for economic integration that are often regulated in trade agreements which so far have not been covered in most of Africa's PTAs, which the Bank says "tend to be shallow".

African economist **Carlos Lopes** underlined the potential that the AfCFTA gives Africa to speak with one voice in trade negotiations. According to the renowned economist Europe has 13 types of trade arrangements with Africa, each of which it defends firmly, he told the newspaper.

"Europe needs to understand the direction Africa is going in with the setting up of the AfCFTA… We Africans must be more united to defend our own interests," he declared (LeMonde, 2021).

According to Gyude Moore, senior policy fellow at the Center for Global Development, in the December 2020 issue of African Business:

"Despite the rhetoric of Africa's external partners, the continent's prosperity has never been the true objective of their policies and we cannot expect that to change now."

In tandem with the adoption of the AfCFTA, the Protocol to the Abuja Treaty relating to Free Movement of Persons, Right of Residence and Right of Establishment was opened for signature at the 2018 AU Summit in Kigali. The Protocol recognizes that the free movement of persons Africa will facilitate the establishment of the AfCFTA. Its objective is to facilitate the implementation of the African Economic Community by providing for the progressive implementation of the free movement of persons, right of residence and right of establishment. Included in its provisions are the intentions to abolish visa requirements, introduce the African Passport, and oblige State Parties to mutually recognize academic, professional and technical qualifications. It is expected that implementation of the AfCFTA will support the Boosting Intra-African Trade (BIAT) aim to double intra-African trade by 2022 and promote industrialization, since it will require the establishment of cross-border value chains and promote a larger and more sophisticated range of investments. Enhanced intra-African trade in goods will also promote employment, social advancement, consumer choice, and a range of other objectives closely associated with the Sustainable Development Goals (SDGs). However, there are significant risks as trade liberalization on its own do not lead to lower poverty levels in the absence of financial sector development, rising education levels and strong governance structures (Le-Goff & Singh, 2014).

More recently, in 2013 during the commemoration of the 50th anniversary of the Organization of African Unity (OAU), African Heads of State and Government launched Agenda 2063, which is described as 'a shared framework for inclusive growth and sustainable development for Africa to be realized in the next fifty years. Member States emphasized a guiding vision '*to build an integrated, prosperous and peaceful Africa, driven and managed by its own citizensand representinga dynamic force in the international arena'.*

One of the flagship projects identified under Agenda 2063 is the creation of the AfCFTA, which *'aims at significantly accelerating growth of intra-African trade and use trade more effectively as an engine of growth and sustainable development. It includes doubling of intra-African trade by 2022, strengthen Africa's common voice and policy space in global trade negotiations and establish the financialinstitutions within agreedupon timeframes*.'

Once implemented, the Agreement is expected to cut tariffs on 90% of goods traded within the continent. This is expected to increase intra-African trade, which is disappointingly low when compared to intra-regional trade within other trade configurations, such as the Association of South East Asian Nations or the European Union (EU). In 2016, for example, intra-African exports accounted for 18% of total exports, compared to 59% and 69% respectively for intra-Asian and intra-European exports (Sow, 2018). It has been observed that African countries trade more value-added products amongst themselves, unlike their exports to the rest of the world which are mainly commodities (Songwe, 2018). The AfCFTA has therefore the potential to increase intra-African trade in manufactured and other value-added products, which can prepare African countries for entry to other emerging economies and developed country markets.

PROSPECTS OF AfCFTA

It will provide a large market space for businesses and entrepreneurs in Africa which will result in a boost in economic productivity, more employment, improvement in income and finances of African populace thereby helping to alleviate poverty. This enlarged African markets provides an opportunity for sectional industrial development based on environmental relative advantages and needs which would reduce cost of production and distribution between African states.

Reduction of national barriers such as adverse immigration policies and prohibitive tariffs. There would be free and increased movement of goods and services as a result of increased interstate trading.

Infrastructure and facilities such as roads and transport systems, border facilities, power generation and distribution between African states would improve. Facilities such as health care, trading outfits and markets, financial institutions and education would also be improved to meet rising demands of cross-border population.

With the improved incomes there would be poverty alleviation which coupled with improved amenities would boost human rights. The African Continental Free Trade Area (AfCFTA) presents a major opportunity for African countries to bring 30 million people out of extreme poverty and to raise the

incomes of 68 million others who live on less than $5.50 per day.With the implementation of AfCFTA, trade facilitation measures that cut red tape and simplify customs procedures would drive $292 billion of the $450 billion in potential income gains(Worldbank, 2022).

Implementing AfCFTA would help usher in the kinds of deep reforms necessary to enhance long-term growth in African countries. AfCFTA regional market is a major opportunity to help African countries diversify their exports, accelerate growth, and attract foreign direct investment. Security would be improved and this will attract more direct foreign investment.

The United Nations Economic Commission for Africa estimates that AfCFTA will boost intra-African trade by 52 percent by 2022. A report by the World Bank anticipates that AfCFTA could lift 30 million Africans out of extreme poverty, boost the incomes of nearly 70 million people, and generate $450 billion in income by 2035. On January 13, 2022, AfCFTA took a major step towards its objective with the establishment of the Pan-African Payments and Settlements System (PAPSS), which allows payments among companies operating in Africa to be done in any local currency.

CHALLENGES

Lack of political will and commitment by state parties to the implementation of the objectives of the Agreement. States still cling to the idea of sovereignty to abandon or avoid their obligations under regional and sub-regional economic agreements.

Labour displacement by influx of labour from other states or by technologies introduced by investors for faster and better production processes. This may result in xenophobic attacks by locals, violence and mass deportation of foreign nationals of Member states. (South Africa: Widespread Xenophobic Violence Implement National Action Plan; Hold Attackers Responsible, 17 September, 2020 Human Rights Watch www.hrw.org)

Low Capital for the Implementation of the Treaty. Most African states are unable to meet their financial obligations to regional and sub-regional bodies.

Lack of Technical Competence in most African States. The dominance of a few countries and the huge disparities in size among members of regional groupings led to concerns about the distribution of benefits. Regions have found it difficult to address the equitable distribution of gains and losses from integration. Mechanisms to provide compensation to the less developed members of groupings have been either absent or ineffective.

The dependence of many African countries on their former colonial powers tended to work against viable regional groupings. The importance of North-South linkages (Franco-African and Commonwealth links and various Lomé Conventions) may have distracted commitment from intra-African groupings. Former colonial masters are also known to use these blocks to hinder integration efforts in Africa.

Regionalism has been driven by public sector organizations and has lacked the support and involvement of the private sector and the general public. Cooperation has been seen as involving bloated and expensive bureaucracies, rather than opportunities for growth and development.

Institutional weaknesses, including the existence of too many regional organizations, a tendency towards top-heavy structures with too many political appointments, failures by governments to meet their financial obligations to regional organizations, poor preparation before meetings, and lack of follow up by sectoral ministries on decisions taken at regional meetings by Heads of State.

Overlapping memberships of competing groups should be resolved to allow a clear political commitment to particular country groupings.

For a common market to function its members at least need to be at peace.The wars and conflicts in a number of African regions have resulted in displacement of people, disruption of production activities, gross violations of human rights, devastated transport networks, communications and other basic infrastructure need to be peacefully resolved.

Policy makers say that the free movement of labour will be a key contributor to the successful functioning of the free trade area, but not all African countries are committed to the concept. Visa free movement is yet to be realized and states still deport nationals of Member states. Xenophobic attacks occur regularly as locals see influx of foreign nationals as a threat to job security.

Insecurity as a result of activities of terrorists, bandits, insurgents, kidnappers, militants has hindered the realization of the objectives of AfCFTA.

CONCLUSION AND RECOMMENDATIONS

The stage is now set to actively change, reform and agree on new framework conditions, regulations and agreements likely to foster and boost Intra-African trade, investment and employment in the intermediate term. Accompanying and seconding policy documents such as the African Union Trade Facilitation

Strategy or the AU Services Sector Development Programme have been developed to set continental-wide guiding standards for further rolling out strategies translating them on to regional and national levels in terms of actual implementation.

AfCFTA is more than a trade Agreement, it is an instrument for Africa's development by driving continental integration. By this Agreement, African economies aim to move from being suppliers of raw materials to the rest of the world, towards trading value added products amongst African states and developing regional value chains. African states would therefore be combining their comparative and competitive advantages to participate in industries from which they would ordinarily be excluded.

The ability of AfCFTA to achieve the much-desired transformational development in Africa is dependent on the successful transition from current narrow and inward-looking approaches to trade and investment towards the strengthening of regional value chains where different segments of the industry value chains are located across the region reflecting local comparative advantages. To realize its potential benefits, the agreement must accomplish its most ambitious goals, which include harmonizing policies on e-commerce, investment, and intellectual property.

Therefore, we recommended that African leaders must show more commitment to their obligations under AfCFTA efforts must be made to bring municipal laws to comply with supranational laws and fulfilling their financial obligations.

States must work to improve infrastructure especially those that will aid mobility of people and goods. Visa restrictions should be relaxed.

African leaders must shun unnecessary foreign interference. AfCFTA is an African project that will require African commitment to succeed. It must proceed regardless of what happens elsewhere. We can expect external actors to continue to pursue policies that run counter to Africa's objectives as long as such policies benefit them. Even as we have made clear our intent to move trade along a multilateral track, Africa's largest partners may seek to pursue a bilateral one.

Ways must be found to involve the private sector in the integration process. It should not be expected that all private sector groups will favour regional integration. In some countries, farmers may fear low-cost competition from elsewhere in the region and may take quite a protectionist stance. The participation of consumer groups and other NGOs should be encouraged as these groups can also gain from exploiting the opportunities for greater intra-regional trade.

Given the disparities in economic weight that exist between members of some groupings, new policy instruments to deal with the fears of economic polarization must be found, for example, multispeed arrangements (allowing weaker members more time to liberalize), compensation schemes, regional investment banks, or structural solidarity funds such as the Food Security Financial Instrument.

Dispute settlement mechanisms need to be strengthened and ways to ensure policy credibility must be put in place. Investors need to have confidence that integration measures will not be reversed and that barriers to regional markets will not be re-instituted overnight. Binding liberalization commitments in the WTO should be encouraged where possible, while the opportunity of the REPA negotiations with the EU should also be used to bind and enforce policy commitments.

Technology in Africa must improve. To achieve this education, both formal and vocational, must be encouraged, the establishment of the African virtual university is a step in the right direction in this regard. Educational facilities must be improved. Access to education should be made easy for indigent persons by the provision of educational loans and scholarships.

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UNLEASHING POTENTIAL: EXPLORING THE INTERPLAY BETWEEN HUMAN CAPITAL DEVELOPMENT AND ADVANCING ENDOGENOUS AFRICAN BUSINESS

Anikwe, Sunday O., Chukwuka, Ekene U. and Chinedu-Eze, Vera C. A
Michael Okpara University of Agriculture, Umudik**e**
Corresponding author: anikwe.obinna@mouau.edu.ng

ABSTRACT

African economies are poised for unprecedented growth and development in a rapidly changing global landscape. African businesses increasingly seek to leverage their unique cultural, natural, and technological resources to create homegrown solutions and products, contributing to sustainable economic development. With its vast and diverse resources, Africa holds immense untapped economic growth and development potential. The synergy between human capital development and the advancement of endogenous African business presents a critical avenue for unleashing the continent's untapped potential. To harness this potential, there is a critical need to explore the interplay between human capital development (HCD) and the advancement of endogenous African businesses. This research explores how investing in developing human capital in Africa can contribute to the growth and sustainability of locally-owned businesses, ultimately fostering economic development and self-reliance in the African continent. It argues that HCD is essential for fostering a vibrant and sustainable African private sector, critical to economic growth and development. The study tried to assess the current state of human capital development initiatives in various African countries and regions investigate how human capital development initiatives impact on the growth and competitiveness of indigenous businesses, with emphasis on exploring how a skilled and knowledgeable workforce contributes to creativity and technological advancement; examine the role of governments in supporting the interplay between HCD and advancing endogenous African business; and propose policy recommendations and strategic guidelines for governments, organizations, and institutions aiming to promote human capital development as a means to support the growth of endogenous African businesses. Intensely anchored on the endogenous growth theory of economic growth as its theoretical construct, the study utilized qualitative research methods, using content analysis as its analytical framework. Analysis results indicate that the current state of human capital development initiatives in various African countries is multifaceted, focusing on improving education, skills, and health to foster economic growth and social development. It shows that human capital development initiatives impact the growth and competitiveness of indigenous businesses through improved workforce skills and providing enhanced innovation and creativity through well-educated and trained employees. Further, it reveals that governments can play a crucial role in supporting the interplay between HCD and advancing endogenous African businesses by creating an enabling environment that fosters innovation, entrepreneurship, and access to finance. This can be done through policies that promote skills development, technology transfer, and investment in infrastructure.
Keywords: Human Capital, Human Capital Development, Indigenous African Business, Economic Growth, Training, Development.

INTRODUCTION

The economic performance of African countries has been comparatively weaker compared to other regions of the world. This can be attributed to underutilized capital structure, particularly in human capital development. Unfortunately, African countries have struggled to invest adequately in human capital development due to limited resources, inadequate policies, and poor governance.

As a result, the workforce in these countries often lacks the necessary skills and knowledge required to drive economic growth, resulting in lower productivity levels and limited job opportunities. Insufficient investment in education, healthcare, and skills training hampers the development and utilization of human capital in African countries, limiting their economic growth potential. This situation perpetuates a cycle of poverty and underdevelopment that is difficult to break without significant investment in human capital development.

According to Kenton (2023), human capital refers to the knowledge, skills, and abilities possessed by individuals that contribute to their productivity and ability to generate economic value. It is essential to any economy, as it drives innovation, competitiveness, and growth. Human capital plays a crucial role in driving innovation within an economy. Individuals with specialized knowledge and skills are more likely

to develop new ideas, technologies, and processes that can lead to advancements and improvements in various industries.

Human capital development encompasses a spectrum of educational, vocational, and skill-building initiatives designed to enhance a nation's burgeoning workforce's knowledge, skills, and abilities. This investment in human capital is crucial, as it empowers individuals and acts as a catalyst for economic growth. It aligns with the Sustainable Development Goals (SDGs) and Africa's Agenda 2063, promoting inclusive and sustainable development across the continent (Kenton, 2023).

Advancing endogenous African businesses, on the other hand, revolves around nurturing homegrown enterprises, industries, and innovations. It represents a shift from dependency on foreign investments and imports, fostering economic self-reliance. African businesses increasingly seek to leverage their unique cultural, natural, and technological resources to create homegrown solutions and products, contributing to sustainable economic development.

The interplay between human capital development and endogenous business advancement is strongly believed to be dynamic and mutually reinforcing. A skilled and educated workforce is a crucial driver of innovation and entrepreneurship, serving as the lifeblood of indigenous businesses. Conversely, thriving local businesses provide a fertile ground for employment opportunities and the application of newly acquired skills, creating a virtuous cycle of economic growth. This synergy can unlock Africa's latent potential in various sectors, from agriculture to technology, fostering self-sufficiency and reducing unemployment. Finding viable ways to achieve this skilled and educated workforce to enhance the application of newly acquired skills on the thriving local businesses in Africa formed the bedrock of this study.

Despite the economic growth experienced by Sub-Saharan African countries in the past three decades, there has been no significant increase in per capita income (World Bank, 2023). This region remains the poorest and lags behind others in crucial human capital indicators such as education, out-of-school children, stunted growth, appropriate skills among youth, and adult survival rates. Investing in human capital through education, health, and social programs might be crucial for accelerating economic growth (World Bank, 2023).

Africa is a continent with significant economic potential. However, it is one of the least developed, partly due to a lack of human capital to translate that potential into social and economic growth. African countries are at the bottom of the World Bank's Human Capital Index (HCI). Africa's HCI score is 0.4, compared to a global average of 0.57 (United Nations, 2021). Sub-Saharan Africa now exploits only 55% of its human capital potential, compared to a global average of 65% (United Nations, 2021).

Before the COVID-19 pandemic, youth and women were severely impacted by poverty and inequalities. The labour market was facing multiple challenges, such as a mismatch between required and available skills, low productivity in the informal sector, and high unemployment and underemployment rates (United Nations, 2021). The rising youth population, expected to exceed one billion by 2050, was particularly vulnerable. School enrollment and quality in Africa were the poorest globally, with over 90 million teenagers struggling to find employment in the low-paid, informal sector. Limited access to crucial resources like health, nutrition, technology, and innovation further exacerbated the situation and posed a significant threat to Africa's growth (United Nations, 2021).

The COVID-19 pandemic has not only had a devastating impact on global health and economies but has also highlighted the vulnerability of communities affected by fragility, conflict, or violence. These communities have been particularly susceptible to the negative consequences of the pandemic, including limited access to healthcare, disrupted education, and increased poverty.

As a result, there is now a pressing need to prioritize investment in the human capital of these communities. Human capital encompasses the knowledge, skills, and expertise that individuals possess. Without a skilled and educated workforce, businesses may struggle to innovate, adapt to changing market conditions, and meet customer demands. A workforce with the necessary knowledge and skills might enable businesses to innovate and adapt to new technologies, market trends, and customer demands. Skilled employees are strongly believed to be able to contribute fresh ideas, problem-solving abilities, and critical thinking skills, which are crucial for driving organizational success.

African economies are poised for unprecedented growth and development in a rapidly changing global landscape. African businesses increasingly seek to leverage their unique cultural, natural, and technological resources to create homegrown solutions and products, contributing to sustainable economic development. With its vast and diverse resources, Africa holds immense untapped economic growth and development potential. The synergy between human capital development and the advancement of endogenous African business presents a critical avenue for unleashing the continent's untapped potential.

To harness this potential, there is a critical need to explore the interplay between human capital development (HCD) and the advancement of endogenous African businesses. This research explores how investing in developing human capital in Africa can contribute to the growth and sustainability of locally-owned businesses, ultimately fostering economic development and self-reliance in the African continent. It argues that HCD is essential for fostering a vibrant and sustainable African private sector, critical to economic growth and development. Therefore, this study examines the current state of human capital development initiatives and how human capital development initiatives impact the growth and competitiveness of indigenous businesses.

REVIEW OF LITERATURE

Human capital is a crucial component of a worker's economic value, encompassing a range of assets contributing to their productivity and effectiveness in the workplace (Kenton, 2023). Human capital refers to individuals' valuable assets, including their knowledge, skills, and health (World Bank, 2019). These assets include education, training, intelligence, skills, health, and other qualities employers value, such as loyalty and punctuality. By investing in human capital, companies can improve the quality of their workforce and enhance their overall competitiveness (Kenton, 2023). These attributes are acquired and developed through education, training, and personal experiences. By investing in their human capital, individuals enhance their potential to contribute to society and become productive members (World Bank, 2019).

Human capital encompasses formal education, specialized training, and the accumulation of information and expertise in various fields. Skills, on the other hand, refer to the practical abilities and competencies acquired through hands-on experience and practical training. Both knowledge and skills enable individuals to perform specific tasks and contribute to the overall productivity of the workforce.

However, human capital is an intangible asset that cannot be easily quantified or listed on a company's balance sheet. This makes it challenging for companies to measure the value of their human capital investment and track its impact on their bottom line. Nevertheless, many companies recognize the importance of human capital and invest in employee training, education, and other initiatives to improve the skills and well-being of their workforce (Kenton, 2023).

"Human Capital Development" refers to acquiring knowledge and intellectual resources through education. This process is intended to improve productivity, efficiency, performance, and output in various areas of work or life. Simply put, it means investing in people's education and skills to enhance their abilities and potential (Akinyemi & Abiddin, 2013).

The technical terms used in this text are 'human capital' and 'productivity.' Human capital refers to individuals' knowledge, skills, and abilities that contribute to their economic value, while productivity refers to the efficiency and effectiveness of producing goods or services (Akinyemi & Abiddin, 2013).

In other words, the more knowledge and intellectual resources an individual or organization possesses, the better it can perform and produce. This process is not limited to formal education but includes informal learning, on-the-job training, and other skill development forms. Human Capital Development is a continuous process that requires ongoing investment in education and training. The benefits of Human Capital Development are not limited to individuals but can also extend to organizations and even entire economies. By investing in Human Capital Development, organizations can improve their competitiveness, increase profitability, and achieve sustainable growth. Similarly, countries that invest in Human Capital Development can improve their economic performance, reduce poverty, and promote social development.

Theoretical Framework

This study is anchored on endogenous growth theory, which argues that economic growth is generated from within a system as a direct result of internal processes. Endogenous growth theory emerged in the 1980s after a group of growth theorists grew increasingly dissatisfied with conventional explanations attributing long-run growth to external factors. Instead, they advocated for a model incorporating explicit determinants of growth, replacing exogenous growth variables such as unexplained technical progress. The research of Arrow (1962), Uzawa (1965) and other notable researchers laid the foundation for this shift in perspective.

Subsequent researchers like Lucas (1988), Rebelo (1991), Romer (1994), Ortigueira and Santos (1997) took a different approach by omitting technological change from their models. Instead, they focused on the indefinite investment in human capital, which had a spillover effect on the economy and mitigated the diminishing returns associated with capital accumulation. This formed the origin of endogenous growth theory. The endogenous growth theory presents a novel perspective on the factors that drive economic

growth. It challenges the neoclassical economic view that external, uncontrollable forces determine prosperity. Instead, it argues that internal processes such as human capital, innovation, and investment capital are the key drivers of a sustained growth rate. More specifically, the theory notes that enhancing a nation's human capital will lead to economic growth by developing new forms of technology and efficient and effective means of production (Liberto, 2023).

According to endogenous growth economists, productivity improvements are directly linked to increased investment in human capital and faster innovation. It proposes that economic growth is mainly driven by internal factors rather than external forces (Romer, 1994). Human capital, innovation, and knowledge investments promote economic growth. The theory also emphasizes a knowledge-based economy's positive externalities and spillover effects, which can lead to economic development. They advocate for government and private sector institutions to support innovation initiatives and incentivize individuals and businesses to be more creative. This includes research and development (R&D) funding and intellectual property rights (Hayes, 2022).

The theory suggests that in a knowledge-based economy, investments in technology and people generate spillover effects that continue to generate returns. High-tech industries such as telecommunications and software drive growth (Hayes, 2022).

Tenets of Endogenous Growth Theory:

- Government policy can raise a country's growth rate if it leads to more intense competition in markets and helps stimulate product and process innovation.
- There are increasing returns to scale from capital investment, especially in infrastructure and investment in education, health, and telecommunications.
- Private sector investment in research and development (R&D) is a crucial source of technological progress.
- Protecting property rights and patents is essential to incentivizing businesses and entrepreneurs to engage in R&D.
- Investment in human capital is a vital component of growth.
- Government policy should encourage entrepreneurship to create new businesses and as an essential source of new jobs, investment, and further innovation.

Its Implications for Africa Endogenous Businesses

Endogenous growth theory proposes that technological progress is not externally determined but rather influenced by the level of human capital and investments in new human capital over time.

Endogenous models highlight that the accumulation of human capital, population growth, and knowledge are the primary drivers of economic growth. In a knowledge-based economy supported by substantial intellectual property rights, there are no diminishing returns to capital accumulation due to positive spillover effects from investments in technology and human resources.

Endogenous growth theory has significant implications for both Africa's economic development and the growth of endogenous businesses in Africa. It emphasizes the importance of internal factors, such as human capital, innovation, and knowledge, in driving sustained economic growth. For African businesses, this means investing in human capital development to enhance the knowledge and capabilities of their workforce. By prioritizing employee training and development, African businesses can improve their productivity and competitiveness in the market.

Moreover, endogenous growth theory highlights the importance of innovation in driving economic growth. Endogenous businesses in Africa can foster innovation by creating an enabling environment that supports research and development, entrepreneurship, and technological advancements. This includes providing incentives for private sector investment in innovation, promoting collaboration between academia and industry, and protecting intellectual property rights.

Endogenous growth theory also emphasizes the positive spillover effects of a knowledge-based economy. Endogenous African businesses can leverage these spillover effects by encouraging knowledge-sharing, technology transfer, and collaboration with international partners. This can help endogenous businesses in Africa to bridge the technological gap and promote their growth.

However, endogenous businesses in Africa may face challenges in implementing endogenous growth strategies. These challenges include limited access to quality education, inadequate infrastructure, and insufficient funding for research and innovation. Addressing these challenges requires a comprehensive approach that involves government commitment, private sector involvement, and international cooperation.

Endogenous growth theory provides a valuable framework for endogenous businesses in Africa to achieve sustainable growth and prosperity. By investing in human capital development, fostering innovation, and leveraging knowledge spillovers, African businesses can unlock their potential for long-term success.

METHODOLOGY

In line with the aim of the research, this paper is exploratory; it follows a qualitative research approach to discover new insights, patterns, or relationships about the study's objectives. Relevant data were generated from relevant studies, monographs, papers, and reports on HCD, emphasizing endogenous business in Africa. We referred to reputable journals in HRD, HRM, management, economics, public policy, and administration. Similarly, we have referred to relevant development reports such as World Development reports, United Nations Development Programme (UNDP) reports, UN reports, Africa Commission, and World Bank reports. The review of the papers, reports, and monographs was deliberately intended to gain a broader understanding and shed light on the complexity and multi-disciplinarity of the topic of HCD, especially on endogenous business in Africa. This methodology enabled us to address the main aim and objectives of the paper.

RESULTS AND DISCUSSION

Current State of Human Capital Development Initiatives in Africa

Over the past 15 years, Cote d'Ivoire and Ghana have made significant progress in reducing childhood stunting, achieving an annual reduction rate of more than 5%. Similarly, Rwanda witnessed a remarkable decline in child mortality, with an annual reduction rate of 10%, while Malawi, Uganda, and Senegal experienced reductions of over 6% per year (World Bank, 2019). Notably, Botswana and Rwanda successfully reduced maternal mortality by more than 7% annually, and Botswana, South Sudan, and Rwanda observed a yearly decrease of approximately 4% in the adolescent fertility rate. Furthermore, Africa boasts the highest return on education among all continents, as each additional year of schooling raises earnings by 11% for boys and 14% for girls (World Bank, 2019).
However, despite these positive developments, much work still needs to be done. Africa's human development indicators pose significant challenges and are not improving satisfactorily. Rapid population growth often outpaces progress in areas such as education, healthcare, and overall well-being. The recently introduced Human Capital Index (HCI) by the World Bank aims to assess the potential productivity of the future generation. In Africa, the HCI score stands at 0.4 (Fig. 1), which is lower than the global average of 0.57 (World Bank, 2019). Given the existing circumstances, children born in Sub-Saharan Africa today will grow up to be only 40% as productive as they could be if they had access to complete education and optimal health conditions, as defined by the index. This has significant implications not only for the well-being of individuals and families but also for entire economies. Countries with lower rankings on the index will experience significant foregone income and fall further behind in the global economy.

Figure 1: Africa Human Capital Index

Source: World Bank (2019). The world bank Africa human capital plan: Powering Africa's potential through its people

World Bank human capital project: One of Africa's human capital development initiatives is the World Bank human capital project, a global effort to drive more and better investments in people. More countries from Africa have joined the Human Capital Project than from any other region of the world. By April 2019, 22 African countries had committed to advancing the human capital agenda: Angola, Benin, Burkina Faso, Burundi, Cabo Verde, Cameroon, Cote d'Ivoire, Ethiopia, Swatini, Guinea Kenya, Lesotho, Malawi, Mali, Niger, Nigeria, Republic of Congo, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone and Togo (World Bank, 2019). They have committed to working across government on three fronts: Sustaining leadership and prioritizing human capital across time; Connecting the dots between sectoral programs that contribute to human capital outcomes, including beyond the traditional human development sectors; and improving measurement and evidence.

Japan's Strategic Partnership with Africa: Japan initiated a human capital development initiative in Africa termed the Tokyo International Conference on African Development (TICAD) to promote investment in human capital and quality growth. Africa has a large, youthful population, which presents a significant opportunity for economic growth. The continent has the youngest population globally, over 60% under 25 (UNDP, 2022). This demographic advantage can be harnessed to drive economic growth and development. To fully capitalize on Africa's youthful population, providing young people with the necessary skills and meaningful job opportunities is crucial.

Japan has identified Africa as a strategic partner and has taken steps to promote investment in human capital and quality growth. The Tokyo International Conference on African Development (TICAD) initiative aims to promote investment in Africa's future. TICAD 8 reaffirmed Japan's commitment to Africa, and TICAD 9 in 2025 will continue to drive investment in Africa's future (UNDP, 2022).

TICAD is a platform for African countries and their development partners to discuss and promote development initiatives. The conference focuses on promoting investment in human capital, including education, health, and skills development. Through TICAD, Japan has committed to investing in Africa's future by providing financial and technical assistance to support development initiatives.

Similarly, the African Continental Free Trade Area (AfCFTA) is another human capital initiative created to enhance African economic and social progress. AfCFTA is a trade agreement among African countries that aims to create a single market for goods and services, facilitate trade, and boost economic growth across the continent. The AfCFTA can enhance trade within Africa, stimulate industrialization, increase job opportunities, and facilitate the development of regional value chains to integrate Africa more effectively into the global economy (Kiakiagas, 2021). Additionally, the AfCFTA will enhance Africa's appeal as an investment destination and contribute to empowering its human resources by providing better access to trade opportunities.

The AfCFTA has the potential to have a substantial impact on human capital development in Africa in several ways:

i. Increased Economic Opportunities: By promoting trade and economic growth, AfCFTA can create more job opportunities and increase income, which can contribute to human capital development.

ii. Reduce Structural Unemployment: The African Continental Free Trade Area (AfCFTA) can address the structural unemployment issue in Africa. Many manual workers have struggled to adapt to the changing labour market due to rapid deindustrialization. However, AfCFTA will create a competitive product market, leading to investments in education, research, and human capital development (Kiakiagas, 2021). This will enable the industry to produce more efficiently and transport them to the AfCFTA market at a lower cost.

iii. Mitigate Human Capital Flight: Additionally, AfCFTA will help reduce the migration of skilled workers from African countries to developed nations. This brain drain has negatively affected the African economy, causing the loss of its best human capital to Western and Eastern countries (Kiakiagas, 2021). By providing opportunities for skilled workers to contribute to Africa's exploitation, mining, and manufacturing processes, AfCFTA can help retain and utilize Africa's highly skilled and innovative workforce.

iv. Skills Transfer: As businesses and industries expand across borders, there is potential to transfer skills and knowledge, which can positively influence human capital development.

v. Education and Training: Governments and organizations may invest in education and training programs to prepare the workforce for the opportunities and challenges of the AfCFTA, which can lead to improved human capital.

vi Entrepreneurship: The agreement can stimulate entrepreneurship and innovation, developing human capital among those who establish and manage businesses.
vii. Improved Health and Well-being: Economic growth can lead to increased investments in healthcare, sanitation, and social services, contributing to the overall well-being and development of human capital.
Another African human capital development initiative is The World Bank's Human Capital Plan
for Support to Countries. The World Bank is preparing to assist African countries in developing human capital and addressing their specific priorities. By 2023, the World Bank aims to support African countries in achieving the following targets:

Survival: Reduce the under-5 mortality rate from 75 deaths per 1,000 live births to 45, saving 4 million lives

■ **Health:** Reduce the stunting rate from 32% to 26% of all children, saving 11 million children from stunting and increase the overall adult survival rate from 0 73 to 0 81 through improved prevention and stronger health systems

■ **Education:** Increase learning-adjusted years of school from 4 94 to 5 88 years, a 20% increase

■ **Social Protection:** Increase social protection coverage from 20% to 30% of those in the poorest economic quintile in low-income countries, adding coverage for 13 million people

■ **Fertility:** Reduce the adolescent fertility rate from 102 to 83 births per 1,000 women aged 15 to 19 years

Human Capital Initiatives and the Growth/Competitiveness of Endogenous Businesses in Africa

Human capital development initiatives in Africa are programs or policies that aim to develop and enhance individuals' skills, knowledge, and health to drive economic growth and development on the continent. Some human capital initiatives in Africa and their impact are discussed below:
i. Education: Education is a critical component of human capital development. Many African countries have implemented initiatives to improve access to education, particularly for girls and marginalized communities. These initiatives include building schools, providing scholarships, and hiring qualified teachers. Some countries have also implemented policies to promote science, technology, engineering, and mathematics (STEM) education, which equips individuals with the technical skills needed for various industries.
ii. Health: Health is another essential aspect of human capital development. Many African countries have implemented initiatives to improve access to healthcare services, particularly in rural areas. These initiatives include building clinics, training healthcare workers, and providing vaccinations. Additionally, some countries have implemented policies to address malnutrition, which can have long-term effects on cognitive development.
iii. Skills Development: Skills development initiatives aim to equip individuals with the necessary skills for employment and entrepreneurship. These initiatives include vocational training programs, apprenticeships, and on-the-job training. By developing a skilled workforce, African countries can attract more investment and promote economic growth.
iv. Digital Literacy: Digital literacy initiatives aim to improve access to information and communication technology (ICT) skills. These initiatives include providing school computer labs, training teachers in ICT skills, and promoting using mobile devices for learning. By improving digital literacy, individuals can access more information, connect with others, and participate in the digital economy.
v. Entrepreneurship: Entrepreneurship initiatives aim to promote business development and innovation. These initiatives include providing access to finance, mentorship programs, and business incubators. African countries can create jobs, drive innovation, and promote economic growth by supporting entrepreneurship.
Human capital initiatives in Africa aim to develop and enhance individuals' skills, knowledge, and health to drive economic growth and development on the continent. By investing in education, health, skills development, digital literacy, and entrepreneurship, African countries can unlock the full potential of their human capital and promote sustainable economic growth.

Role of Governments in Supporting the Interplay between Human Capital Development (HCD) and Advancing Endogenous African Businesses

Sustaining the growth and development of African endogenous businesses through the human capital approach entails the joint commitment of both the private and public sectors to invest in human capital development. The government plays a critical role by designing and implementing policies that promote inclusive and equitable access to education and healthcare for all citizens. By investing in human capital

development, government can enhance the productivity and skills of their workforce, improve overall well-being, foster innovation, and create a foundation for sustained economic growth and development.

Also, endogenous businesses and small/ medium enterprises (SMEs) are crucial in driving innovation and economic development, accounting for nearly 90% of businesses in developed and developing economies (Fjose et al., 2010). They contribute to job creation, employment, tax revenue, and Gross Domestic Product (GDP) (Muriithi, 2017). However, despite their importance in Africa, locally-owned businesses and SMEs face various challenges, such as power shortages, limited access to capital, inadequate management skills, lack of information, and corruption (Muriithi, 2017). Unfortunately, many African governments provide minimal support to locally owned businesses and SMEs, overlooking their significant economic potential and potential to serve as pillars of development. Governments can help improve human capital development for the growth and development of locally-owned businesses through the following:

i. Education and Skills Development: Governments can invest in education and skills development to build a skilled workforce that can drive innovation and entrepreneurship for the locally owned businesses in Africa. This includes improving access to quality education at all levels, from primary to tertiary education. African governments can allocate resources to build schools, hire qualified teachers, and provide scholarships or financial assistance to ensure that more individuals have the opportunity to receive education. Additionally, promoting science, technology, engineering, and mathematics (STEM) education and vocational training programs can equip individuals with the necessary technical skills to start locally-owned businesses.

ii. Access to Finance: Lack of access to finance is a significant barrier for many African businesses and small and medium-sized enterprises (SMEs). Governments can play a role in supporting the development of financial systems that cater to the needs of these businesses. This can be done by establishing microfinance institutions that provide entrepreneurs with small loans and financial services. Governments can also create venture capital funds or angel investor networks that provide funding and mentorship to startups and SMEs. Furthermore, governments can create tax incentives or grants to encourage private sector investment in HCD initiatives and business development.

iii. Regulatory Environment: Governments can create an enabling regulatory environment that supports business growth and innovation. This involves simplifying business registration processes, reducing bureaucracy, and streamlining regulations. By creating a favourable business climate, governments can attract domestic and foreign investment, contributing to the growth of endogenous African businesses. Governments can also establish tax incentives for businesses that invest in research and development, innovation, and job creation.

iv. Infrastructure Development: Adequate infrastructure is crucial for business growth and competitiveness. Governments can invest in infrastructure development, including transportation networks, energy systems, and communication technology. By improving roads, ports, railways, and airports, governments can facilitate the movement of goods and services, reduce logistical costs, and enhance trade opportunities. Access to reliable energy sources is also essential for businesses to operate efficiently. Additionally, governments can invest in expanding internet connectivity and digital infrastructure to support the growth of technology-driven businesses.

v. Public-Private Partnerships: Collaboration between governments and the private sector is vital for advancing endogenous African businesses. Governments can create platforms for collaboration by establishing public-private partnerships (PPPs). PPPs facilitate cooperation between government agencies and private sector entities in skills development, research and development, infrastructure projects, and investment promotion. Governments can leverage private sector expertise, resources, and networks through PPPs to support HCD initiatives and business development.

By implementing these strategies, governments can create an enabling environment for HCD and foster the growth of endogenous African businesses. This will contribute to sustainable economic development, job creation, and poverty reduction across the continent.

CONCLUSION

Investing in human capital is expected to build a skilled workforce, which is essential for a country's economic growth. In the context of globalization and technological advancements, human capital development has become increasingly crucial for a nation's economic advancement. Sustaining the growth and development of endogenous African businesses through the human capital approach entails the joint commitment of both the private and public sectors to invest in human capital development. This involves implementing functional and quality education, employee training, skill development, and providing

access to affordable healthcare services. The public sector plays a critical role by designing and implementing policies that promote inclusive and equitable access to education and healthcare for all citizens. By investing in human capital development, African societies can enhance the productivity and skills of their workforce, improve overall well-being, foster innovation, and create a foundation for sustained locally-owned business growth and development. We recommended enhancing human capital development and supporting locally owned African businesses can be achieved through various calculated strategies. By implementing these comprehensive strategies, African countries can enhance human capital development, empower local entrepreneurs, and create an enabling environment that supports the growth and success of locally-owned businesses - investing in Education: Governments and stakeholders should prioritize education and ensure access to quality schooling for all citizens. This involves investing in infrastructure, teacher training, curriculum development, and promoting inclusive education that addresses local needs. Vocational and technical education should also be strengthened to provide skills that align with market demands.

Improving Healthcare Systems: Enhancing healthcare services is crucial for human capital development. Governments should invest in healthcare infrastructure, equipment, and training professionals. This includes promoting preventive care, immunization programs, maternal and child health services, and addressing specific health concerns prevalent within the local population.

iii. Skills Development and Training: Governments and private sector entities can collaborate in offering skills development programs tailored to the needs of local businesses. This includes vocational training, apprenticeships, entrepreneurship development, and mentorship initiatives. Skill-building in sectors with growth potential, such as technology, agriculture, and renewable energy, can empower individuals to contribute effectively to the local economy.

Access to Finance and Business Support: Access to finance is a significant barrier for local businesses. Governments can establish policies and programs that facilitate access to capital, such as setting up special funds, providing loan guarantees, or supporting microfinance institutions. Additionally, offering business development services, including training, technical assistance, and market access, can help entrepreneurs establish and grow their businesses.

Promoting Innovation and Research: Governments should encourage research and development activities to drive innovation and technological advancements within local industries. This can be achieved through grants, research funding, and partnerships between academia, industry, and research institutions. Supporting innovation hubs and startup incubators can foster an entrepreneurial ecosystem, encouraging the growth of locally-owned businesses.

Strengthening Local Supply Chains: Encouraging collaboration between local businesses and large enterprises can boost the capacity and competitiveness of local industries. Governments can implement policies that promote local sourcing, subcontracting, and supplier development programs. This helps create linkages, increase market access, and foster knowledge transfer between larger companies and smaller, locally-owned enterprises.

Public-Private Partnerships: Collaboration between the public and private sectors is essential for human capital development and supporting local businesses. Governments can partner with businesses, industry associations, and civil society organizations to develop and implement programs jointly. This could involve sharing resources, expertise, best practices and leveraging private sector investments to benefit human capital development and local businesses.

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SUB THEME
MANAGING COMPLEXITIES IN BUSINESS IN AND FOR UNCERTAIN TIMES

EFFECT OF COMMERCIAL BANKS' CREDIT ON AGRICULTURAL OUTPUT IN NIGERIA

Idika, Joel E., Ozioko, Joyce N. and Okoro, Victor O.
Department of Banking and Finance, Michael Okpara University of Agriculture, Umudike, Abia State.
Corresponding author: joelidika@gmail.com

ABSTRACT
Due to its significance in supplying food for the country's expanding population, serving as a source of raw materials for the expanding industrial sector, generating foreign exchange earnings, creating jobs, and serving as a market for industrial sector products, the agricultural sector in Nigeria plays a significant role in driving economic development and industrialization (World Bank, 2016). But that industry has a lot of issues, like not having enough money to implement all the different projects that need to be done for overall development. Thus, the purpose of this study was to examine the impact of lending from commercial banks on the performance of Nigeria's agricultural industry from 1986 to 2021. The agricultural credit guarantee scheme fund had a negligible impact on agricultural sector output in Nigeria, according to the study, which used the ARDL analysis method to show that both commercial banks' credit and lending rates had positive and significant effects on agricultural sector output. This suggests that agricultural financing reform of commercial banks' credit and lending rates improved agricultural sector output in Nigeria. Thus, the study came to the conclusion that Nigeria's agricultural sector output was significantly impacted by the loan provided by commercial banks. Consequently, the study suggested that in order to encourage banks to give the agricultural subsector more loans and advances, the government and other monetary authorities should employ selective credit control measures.
Keywords: agriculture, output, commercial bank, loans and lendings.

INTRODUCTION:

The science of cultivating soil for crops and raising livestock is known as agriculture. Since agriculture was the earliest human occupation, it is as old as man. It continues to be a crucial component of the expansion and advancement of any current economy, notwithstanding the advancement of contemporary civilization (Orji *et al.,* 2021). Because of its significance in providing food for the country's expanding population, supplying raw materials to the expanding industrial sector, generating foreign exchange earnings, creating job opportunities, and providing a market for the industrial sector's output, Nigeria's agricultural sector is a major driver of economic development and industrialization (World Bank, 2016). Nigeria is blessed with an abundance of fertile land and a climate that is ideal for farming. Out of Nigeria's total land area of 91 hectares, 18 million hectares were designated as permanent pasture for the production of animals as of 1990, leaving the other 81 million hectares considered to be arable land. This makes it possible to produce a range of cattle, fisheries, forestry, and crop goods (Okafor, 2020).

Although Nigeria is often recognized as the continent's top oil producer, the country's economy still primarily depends on agriculture. Nigeria is blessed with an enormous amount of fertile land, rivers, streams, lakes, forests, and grasslands, in addition to a sizable population that can support a highly profitable and productive agricultural sector. This sector can guarantee food and raw material self-sufficiency for the industrial sector, as well as provide the thriving population with gainful employment and foreign exchange for the economy. Mathias and Onoshole (2021) predict that increased agricultural production of goods and services will result from bank lending, which will have a favourable effect on the investible sectors of the economy. Enough funding for agricultural projects will improve our young investors' entrepreneurial performance and advance food security. According to Nwokoro (2017), bank loans can help farmers overcome their financial obstacles since it offers incentives for them to quickly adopt new technology, which can help them achieve rapid growth and productivity.

Despite the enormous role of agriculture, the agricultural sector in Nigeria has been engulfed by so many problems, including inadequate finance to carry out various development projects in the sector for the country's overall development. Due to the hazardous nature of farming operations, commercial banks are hesitant to lend to farmers. Statistics indicate that Nigeria's agriculture industry has received very little credit from commercial banks (see Fig. 1). The graph in Figure 1.1 demonstrates that, despite a consistent growth in loan from commercial banks between 2017 and 2020, credit to the agricultural sector has been mainly unstable between 1981 and 2020.

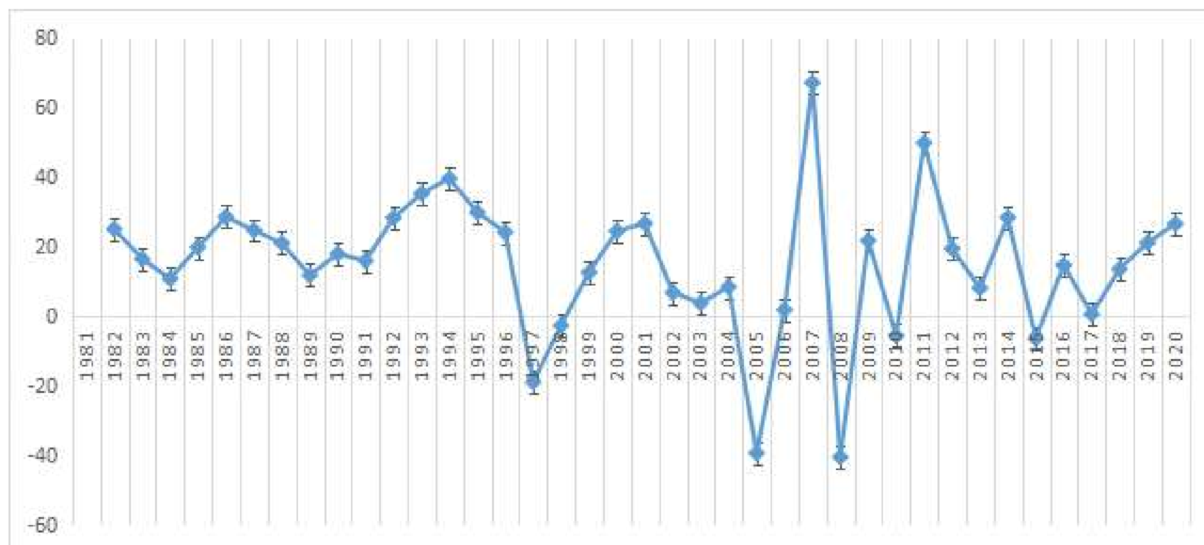

Fig. 1: Growth rate of commercial banks credit to agricultural sector
Source: CBN Statistical Bulletin (2020).

Currently, a significant portion of Nigeria's population suffers from malnutrition and hunger due to agricultural neglect, despite the country's large expanse of rich soil. Few agro-industries in the area rely heavily on the importation of raw materials required for their production, and a large number of young Nigerians are jobless. It is noteworthy that a number of laws have been implemented to address these issues, with the goal of forcing banks to play crucial roles in the financing space by issuing credits (Obilor, 2013). But the fact is that banks—more especially, commercial banks—have not yet faced up to this issue since there hasn't been much movement in the loan to agriculture space.

Numerous causes have been cited as the cause of Nigeria's agricultural sector's poor performance. But the most notable of them is, to use the words of Udoka *et al.* (2016), inadequate finance or a weak supply of credit. The government has implemented a number of credit guidelines, such as the Agricultural Credit Support Scheme of 2006 and the Agricultural Credit Guarantee Scheme Fund, in an effort to lessen the issue of inadequate funding for Nigeria's agricultural sector and to entice commercial banks, who are unwilling to finance the sector due to the perceived high risk involved.

The agricultural sector's performance is still below average despite the Federal Government's alleged commitment of numerous policies, resources, and schemes through formal credit institutions, schemes, policies, and programmes. This is because the sector is unable to meet domestic food needs, provide raw materials for agro-allied industries, and generate enough foreign exchange through exports (Mathias & Onoshole, 2021; Okafor, 2020; Asukwo *et al.*, 2020; Nwokoro, 2017). Furthermore, the industry is still undercapitalized; the majority of farmers are unable to obtain the equity capital needed for both modernization and business expansion, and banks continue to be extremely reluctant to lend money to the industry, disregarding government policy initiatives aimed at resolving the issue (Okafor, 2020). In light of this, the study investigates the impact of lending from commercial banks on Nigeria's agricultural output. It specifically seeks to ascertain the effect of commercial banks' credit on agricultural sector output in Nigeria, determine the effect of loans guaranteed under the Agricultural Credit Guarantee Scheme Fund on Nigeria's agricultural output, and assess the effect of lending rate on the agricultural output of Nigeria using data from banks' credit to the sector 1986 to 2021.

It is significant to note that during the sample period, the banking industry saw various changes. Notably, the 2005 bank restructuring programme resulted in mergers and acquisitions among Nigerian commercial banks.

REVIEW OF LITERATURE

Bank Credit:

The lending of money by the lender to the borrower is known as credit. According to Nwokoro (2017), credit is the implied promise of one party to reimburse another for goods and services obtained or money borrowed. Since banks act as a conduit for money acquired in deposits from the economy's surplus units

and transferred to the deficit units, which require money for productive uses, credit must be independent of the banking industry. As a result, banks have debts to fund depositors and creditors to fund borrowers. The ability to borrow money that the banking system extends to a person, government agency, business, or organization in the form of loans is known as bank credit. Bank credit, according to Egwu (2016), is the total amount of advances and loans made to economic actors by the banking industry. Collateral is frequently attached to bank loans in order to guarantee loan repayment in the case of default. Credit facilitates the conversion of savings into profitable investments, thereby promoting economic expansion. Thus, the ability to obtain credit facilitates the role of intermediation, which is critical to the expansion of the economy. There are two categories of domestic bank credit totals: credit to the public sector and credit to the private sector.

The Link Between Credit and Agricultural Productivity

In the production of agriculture, money is important. Abdulrahman (2013) claims that farming requires a lot of capital. Money is required to pay for labour and other essential production expenditures, as well as to buy supplies ahead of time. Additionally, money is needed after production to stabilise household consumption over time, particularly in cases where production varies annually. This demonstrates that capital affects agricultural productivity in a favourable and noteworthy way.

Furthermore, Lawal *et al*. (2019) contended that loans from commercial banks are a significant source of capital that will address the issue of cash being needed to satisfy the agricultural production cycle. The fundamental production cycle, which includes clearing the ground, planting, cultivating, and harvesting, typically takes many months to complete and generates very little financial revenue. However, cash is still required for material purchases, input purchases, and consumption. Thus, insufficient funding could reduce the output of agriculture. This is due to Obilor's (2013) assertion that farmers lacking official credit facilities and with insufficient capital will utilize fewer inputs than farmers with formal credit facilities and sufficient cash. The fact that the materials that come into the production process from outside (inputs) are transformed into something better and more useful (output) with time lags that are significant enough to matter heavily restrains agricultural production. As a result, rural households must balance their budget during the season when input purchases and consumption are high and revenue is low (Udoka *et al*., 2016). Again, sufficient credit is thought to be a crucial instrument for encouraging output and levelling out consumption, particularly for low-income households (Nwokoro, 2017; Obilor, 2013). This implies that households with little savings can still obtain the cash needed to buy agricultural inputs, particularly those that are essential for controlling weeds, pests, and diseases as well as profitable investments, because they can borrow money with ease. Additionally, farmers and entrepreneurs are able to diversify by making new investments due to cheap availability and sufficient finance.

Theoretical Framework

The Financial Liberalization Theory

Shaw (1973) and McKinnon (1973) established this theory. According to the theory, one of the main obstacles to the mobilization, investment, and expansion of savings is the role that government involvement plays in the financial markets. Savings mobilization is hampered by the government's involvement in regulating interest rates and allocating credit to the right economic sectors in emerging nations. It makes it more difficult to accumulate financial assets, create capital, and expand the economy. Deposit interest rates indirectly discourage saving money, which results in an abundance of liquidity outside the banking system. The financial markets tend to be distorted by widespread government intervention and engagement in the financial system through the regulatory and supervisory network, especially when it comes to regulating interest rates and credit distribution, according to McKinnon and Shaw (1973). To this extent, financial mediation becomes fragmented due to government interference that negatively impacts market players' decisions about savings and investments. An economy that is fiscally constrained is the end result.

Mckinnon and Shaw's main contention is that credit should be distributed according to the free market, and financial markets should be liberalized. In this scenario, the low-yielding project will be terminated and the real interest rate will return to its equilibrium values. As a result, savings, investment efficiency, and the total real credit supply will all rise. Economic growth results from increased investment volume as a result of this. The incomplete information paradigm is the source of the primary criticism levelled at the financial liberalization theory. This school of thinking rejects the thesis put forth by these researchers. Examining information asymmetry and expensive information that leads to credit rationing, it looks at the issue of financial development. Two major issues are brought about by asymmetric information, according to Stiglitz & Weiss (1981). The first is the moral hazard theory, which holds that higher interest rates that result from financial reforms and financial liberalisation policies in particular exacerbate risk-taking across

the economy and endanger the stability of the financial system, which can quickly spark financial crises. The second theory is the adverse selection of imperfect information paradigm.

Empirical Framework

The effect of agricultural output growth and funding on the creation of jobs in Nigeria between 1981 and 2017 was examined by Orji *et al*. (2021). For analysis, the paper used the Auto Regressive Distributed Lag (ARDL) Model framework. According to the empirical findings, employment creation is mostly boosted in the near term by the lag in agricultural output growth, even though funding for agriculture creates jobs in the long run as well. The labour force population, wages, and total expenditure were not significant factors that affected the development of employment, but price and agricultural output were. The research findings suggest that policymakers ought to guarantee the complete use of all funds designated for certain agricultural programmes and interventions. To generate job possibilities, To achieve their unique goals, policymakers should closely examine how each plan and policy is being implemented.

Using secondary data gathered from the Central Bank of Nigeria Annual Reports and Statement of Account, Okafor (2020) investigated the effects of interest rates on agricultural output in Nigeria as well as the impact of the Agricultural Credit Guarantee Scheme Fund on that output. The Ordinary Least Squares (OLS) Method, the Augmented Dickey-Fuller and Philip-Perron tests for unit roots, and econometric approaches were used to analyze the data. According to the study, interest rates had a negative and negligible impact on agricultural output, while loans to the agricultural sector, government spending on the industry, and monies from the agricultural credit guarantee scheme all had positive and significant effects. Accordingly, the study came to the conclusion that throughout the time under examination, commercial bank loans had a beneficial impact on Nigerian agricultural output and had raised agricultural productivity there. The report suggested that in order to greatly increase the agricultural credit guarantee scheme's capital base, the government should bolster it through large financial investment.

The impact of commercial banks' lending on the expansion of Nigeria's agricultural sector was studied by Asukwo *et al.* in 2020. The Central Bank Statistical Bulletin was used to obtain secondary sources of data, and multiple regression analysis was used to assess the impact of commercial bank lending on the expansion of Nigeria's agricultural industry. The study found a substantial correlation between loans and advances, interest rates, liquidity, and bank assets and agricultural output. According to the report, banks should try to lend money for agriculture when it's needed. Additionally, commercial banks should have access to sufficient capital, and the lending rate should be no more than one digit. Oyelade (2019) looked into how Nigerian agriculture was affected by commercial bank financing between 1980 and 2015. Fully Modified Ordinary Least Squares (FMOLS) was the method used in the study. It was shown that the interest rates on the assets of deposit money banks and commercial banks' loan to agriculture are statistically significant in predicting Nigeria's agricultural output over the studied period. Additionally, commercial bank loans for agriculture and deposit money bank assets determine the amount of crop production produced in Nigeria; similarly, the amount of livestock produced in Nigeria is determined by commercial bank loans for agriculture and the interest rate on those loans; the amount of forestry produced in Nigeria is determined by commercial bank loans for agriculture and the interest rate on those loans; and the amount of fishing produced in Nigeria is determined by commercial bank loans for agriculture and the interest rate on those loans.

In order to establish a causal relationship between the dual, Lawal *et al*. (2019) looked at the impact of bank lending on agricultural productivity in Nigeria. The statistical analysis tool is the Toda and Yamamoto Granger non-causality techniques. The variables were subjected to several tests, including the Unit Root Test to ensure stationarity in the presence or absence of a structural break, the Johansen Co-Integration Test to demonstrate the lack of a long-term relationship between the variables, and the Vector Autoregression Estimates Decompositions Test to calculate the contribution of each endogenous variable to the forecast of other variables. Next, the Toda and Yamamoto non-Granger causality test was used to determine whether a causal relationship existed between the variables. The results indicated a unidirectional causality between ACGSF and AGDP, supporting the estimate of the VAR model regarding the role of ACGSF in explaining changes to AGDP. There is no evidence of any other causal relationship between AGDP and any other indicator, or vice versa. Ajayi *et al*. (2017) assessed how bank loans to the agriculture sector and agricultural finance policies affected the productivity of agriculture. A time series linear regression model was utilised in the study, and data from 1981 to 2015 were used. The findings showed that while lending rate (LR) has a significant negative impact on agricultural productivity, deposit money bank loans (CBF) and the Agricultural Credit Guarantee Scheme Fund (ACGSF), which serves as a proxy for agricultural financing policy, have a significant positive impact on agricultural productivity in NigeriaIt is advised that commercial banks support the government's agricultural financing

programme by facilitating farmers' access to low-cost, easily accessible funding. Farmers should also be made aware of the advantages of using bank and policy money to increase productivity. The report also suggested that the government support farmers' financial inclusion. The impact of commercial banks' loans on Nigeria's agricultural output was studied by Udoka *et al.* (2016). Four research hypotheses were developed in order to drive and guide the investigation. For this study, an ex-post facto research design was used. The Central Bank of Nigeria Statistical Bulletin and published papers provided the study's data. The equation was estimated using the regression approach of ordinary least squares. The estimated results demonstrated a favourable and significant association between agricultural loan guarantee plan funding and agricultural productivity in Nigeria, according to the results collected. There was a positive and significant association between commercial banks' loan to the agricultural sector and agricultural production in Nigeria, suggesting that an increase in money under the Agricultural loan Guarantee Scheme could result in enhanced agricultural production in Nigeria. This outcome indicated that commercial banks were lending more money to the agricultural sector, which in turn raised Nigeria's agricultural output. The results of this study validated theoretical hypotheses by showing a negative correlation between interest rates and agricultural output and a positive and substantial association between government spending on agriculture and agricultural productivity in Nigeria. The study suggested that the government should adequately finance the agricultural credit guarantee plan due to the scheme's beneficial impact on agricultural output. Peasant farmers' access to agricultural financing in Benue State, Nigeria, was examined by Asogwa *et al.* (2014). A systematic questionnaire was utilized to gather data from 130 randomly selected peasant farmers in Benue State. The data were analyzed using both inferential and descriptive statistics. According to the survey, 69.23% of farmers had access to agricultural loans. The majority of farmers (42.22%) obtained loans in the range of 5,000 to less than 50,000 Naira. Among the respondents, money lending constituted the largest source of credit (44.44%). The results of the binary logistic regression demonstrated that, among rural farmers in the study area, access to agricultural credit was significantly influenced at the 5% level of significance by factors such as age, farm investment, access to extension services, household size, awareness, education, farm size, and membership in a cooperative society. The respondents indicated that the biggest barriers to obtaining agricultural financing were lack of collateral security, credit, and approval/disbursement delays (52.31% of farmers supported these points).

Obilor (2013) assessed the effects of credit provided by commercial banks under Nigeria's Agricultural Credit Guarantee Scheme Fund on the agricultural industry. Agriculture was Nigeria's main source of foreign exchange earnings until the mid-1970s. It no longer holds the top spot in the mining industry. The main element influencing the sector's success among these is insufficient capital. As a result, it conducted an empirical analysis to determine how agricultural production was affected by the Agricultural Credit Guarantee Scheme Fund, agricultural product pricing, government funding distribution, and commercial banks' lending to the agricultural sector. The findings showed that government funding for agriculture and the Agricultural Credit Guarantee Scheme Fund had a major positive impact on agricultural productivity. By contrast, there was a notable adverse influence from the other covariates. To increase their agricultural production and activity, farmers should be encouraged to seek for loans from the participating institutions.

Ammani (2012) used the ordinary least square regression analysis framework and the co-integrating Regression Durbin-Watson (CRDW) test method to test for co-integration among the variables in order to analyze the relationship between agricultural production and credit (loans guaranteed by the agricultural credit guarantee scheme fund) in Nigeria from 1981 to 2009. The study concluded that formal credit is positively and significantly related to the productivity of the crop, livestock, and fishery subsectors in Nigeria after finding a significant and positive association between formal credits and the aggregate production of these industries.

The empirical literature assessment indicates that there has been conflicting evidence about the impact of bank credits on agricultural productivity. By expanding the study period until 2021, however, this work hopes to add to the body of current literature. This jump in time is intended to account for some recent events, particularly the COVID-19 epidemic era, which had an impact on financial sector operations and, consequently, the anticipated positive correlation between commercial bank credits and agricultural output in Nigeria.

METHODOLOGY

This study especially looked into how Nigerian agricultural output was affected by credit from commercial banks. Secondary data from the Central Bank of Nigeria (CBN) Statistical Bulletin 2021 edition were used in this study. For each indicator, the data were absolute aggregates covering the 36-year period from 1986 to 2021.

Model Specification

The model of this study was developed from the empirical work of Asukwo et al. (2020), as specified below:

$$AGOUT = \beta_0 + \beta_1 LADV + \beta_2 INTR + \beta_3 LQ + \beta_4 AS + e \quad . \quad . \quad . \quad \text{Eqn. (1)}$$

Where,

AGOUT = agricultural sector output
LADV = loans and advances
INTR = interest rate
LQ = bank liquidity
AS = bank assets

For the current study, bank liquidity and assets were dropped since they constitute part of commercial banks' credit that is being discussed. With these modifications to Eqn. (1) the model for the current study is specified thus:

$$\log(AGOUT) = \beta_0 + \beta_1 \log(CBC) + \beta_2 \log(ACGSF) + \beta_3 \log(LDR) + e \quad . \quad . \quad \text{Eqn. (2)}$$

Where,

AGOUT = agricultural output
CBC = commercial banks' credit
ACGSF = agricultural credit guarantee scheme funds
LDR = lending rate
log = logarithmic notation
β_0 = constant
$\beta_1 - \beta_3$ = coefficients of the independent variables
e = error term

Description of Model Variables

The model variables are described as follows:

Dependent variable:

Agricultural sector output (AGOUT): This represents the entire yearly crop worth in money. It is employed to gauge the agriculture industry's performance. Therefore, a rise in AGOUT indicates that the agriculture sector is doing well.

Independent variables:

Commercial banks' credit (CBC): This statistic counts the total amount of credit given to the agriculture industry by commercial banks. If agriculture receives enough credit and is invested wisely, output will increase.

Agricultural Credit Guarantee Scheme funds (ACGSF): Decree No. 20 of 1977 established the ACGSF, which began activities in April 1978. The fund insures bank loan facilities given to farmers for up to 75% of the defaulted amount, net of any realised security. The Central Bank of Nigeria oversees the fund's daily management and oversees the plan.

Lending rate (LDR): The amount that lenders charge as a proportion of the amount lent or deposited over a specific period of time is known as the lending rate or interest rate. The period of time over which the money is deposited or lent determines the total interest on the amount or the principal amount. Simple interest is used on most loans. Reduced agricultural output results from higher LDR, which deters farmers from borrowing to buy inputs for their operations.

Data used for the analysis
DESCRIPTIVE STATISTICS

	LNACGSF	LNCBC	LNAGOUT	LNLDR
Mean	13.91300	4.098877	8.937526	2.918281
Median	14.25292	4.057255	9.062156	2.888425
Maximum	16.33773	7.284697	9.838331	3.394508
Minimum	11.13338	0.604316	7.969589	2.351375
Std. Dev.	1.916544	1.875331	0.664593	0.201984
Skewness	-0.170353	-0.184440	-0.049065	0.237272
Kurtosis	1.327825	2.056032	1.367489	4.286822
Jarque-Bera	4.368375	1.540722	4.012085	2.821657
Probability	0.112569	0.462846	0.134520	0.243941
Sum	500.8678	147.5596	321.7509	105.0581
Sum Sq. Dev.	128.5600	123.0904	15.45893	1.427911
Observations	36	36	36	36

Augmented Dickey-Fuller Unit Root Test

Items	Test statistics	Critical value	Order of Integration
LNAGOUT	-5.536033	-3.548490	I(1)***
LNCBC	-6.622946	-3.548490	I(I)***
LNACGSF	-5.178886	-3.548490	I(1)***
LNLDR	-6.101666	-3.544284	I(0)***

Note: (, **,***) denotes 10%, 5% and 1% significance levels, respectively. Source: E-view 9.0*

Hypothesis Testing

Ho_1: Commercial banks' credit significantly affects agricultural output in Nigeria. The probability value of the coefficient of commercial banks' credit (CBC) was 0.0120. The null hypothesis was rejected and the alternative hypothesis was accepted since the probability was less than 0.05. Thus, it was determined that CBC had a major impact on Nigeria's agriculture sector's output.

Ho_2: Loans guaranteed under the Agricultural Credit Guarantee Scheme Fund have no significant effect on agricultural output in Nigeria. The probability value of the coefficient of loans guaranteed by the Agricultural Credit Guarantee Scheme Fund (ACGSF) was 0.0829 > 0.05. This suggested that there was little impact of ACGSF on Nigeria's agricultural output. Therefore, we reject the alternative hypothesis in order to refuse to accept the null hypothesis.

Ho_3: The lending rate significantly affects agricultural output in Nigeria.
0.0153 was the probability value linked to the loan rate coefficient. The impact of the lending rate on Nigeria's agricultural output was considerably sentenced because the probability value was less than 0.05. Consequently, the null hypothesis was disproved and the alternative hypothesis was approved.

Discussion of Findings

According to the study, Nigeria's agricultural output was improved by the credit (CBC) and lending rate (LDR) provided by commercial banks. This suggests that funding allocated to the agriculture industry contributed to the sector's rise in productivity. However, the amount of agricultural output decreased as a

result of loans guaranteed by the Agricultural Credit Guarantee Scheme fund (ACGSF). These results were consistent with the theories of financial liberalisation and the supply-leading hypothesis. Studies such as Okafor (2020), Asukwo *et al.* (2020), Oyelade (2019); Lawal *et al.* (2019), Medugu *et al.* (2019); Nwokoro (2017); Ajayi *et al.* (2017); Udoka *et al*. (2016); Toby & Peterside (2014); Olarinde & Abdullahi (2014); Obilor (2013) and Ammani (2012), lend credence to the findings of this study that CBC and LDR were significant in promoting agricultural output in Nigeria.

Bank loan increased agricultural output in Uganda, South Africa, and Pakistan, according to international research like Rahman *et al.* (2014), Nakazi & Sunday (2020), and Chisasa & Makina (2015). These studies also corroborated the conclusions of this specific study. This could imply that bank financing has a universally beneficial effect on agricultural productivity. Nakazi and Sunday (2020) pointed out that macroeconomic volatility, inadequate credit for intended purposes, bad credit management, and other factors could prevent bank credit from increasing agricultural output.

CONCLUSION AND RECOMMENDATIONS

Using the ARDL technique, this study examined the impact of commercial banks' credit on the performance of Nigeria's agricultural industry from 1986 to 2019. According to the study, Nigeria's agriculture sector output was positively and considerably impacted by the credit and lending rates offered by commercial banks. On the other hand, the monies from the agricultural loan guarantee scheme had little impact on Nigeria's agricultural sector's output. The main finding of this study was that loans from commercial banks significantly impacted Nigeria's agriculture sector output. Nigeria's gross domestic product would rise as a result of increased agricultural output brought about by increased agricultural lending from commercial banks.

Based on the findings, the following are the recommendations:

1) Selective credit control measures should be used by the government and other monetary authorities to encourage banks to lend more money to the agricultural subsector. In light of this, it is important for the government and monetary authorities to develop supportive policies and foster an atmosphere that will motivate banks to lend more money to the agricultural sector. Doing so will have a positive effect on the nation's agricultural output, which will in turn contribute more to economic growth.
2) To monitor and provide more credits to Nigeria's agricultural industry, the government should fortify the Agricultural Guarantee Scheme and establish more organisations.
3) To supplement the ACGSF programme, the government ought to push deposit money institutions to give farmers low-interest loans.

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Appendix

DESCRIPTIVE STATISTICS

	LNACGSF	LNCBC	LNAGOUT	LNLDR
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Augmented Dickey-Fuller Unit Root Test

Items	Test statistics	Critical value	Order of Integration
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LNCBC	-6.622946	-3.548490	I(I)***
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LNLDR	-6.101666	-3.544284	I(0)***

Note: (, **,***) denotes 10%, 5% and 1% level of significant respectively Source: E-view 9.0*

ARDL RESULT

Dependent Variable: LNAGOUT
Method: ARDL
Date: 10/16/23 Time: 13:12
Sample (adjusted): 1987 2021
Included observations: 35 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): LNCBCLNACGSFLNLDR
Fixed regressors: C
Number of models evaluated: 500
Selected Model: ARDL(1, 0, 1, 0)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNAGOUT(-1)	0.639255	0.088157	7.251355	0.0000
LNCBC	0.050785	0.018952	2.679699	0.0120
LNACGSF	0.028251	0.026734	1.056732	0.2994
LNACGSF(-1)	0.056771	0.031605	1.796287	0.0829
LNLDR	0.160317	0.062207	2.577148	0.0153
C	1.401211	0.521791	2.685388	0.0119

R-squared	0.993251	Mean dependent var	8.964257
Adjusted R-squared	0.992087	S.D. dependent var	0.654367
S.E. of regression	0.058208	Akaike info criterion	-2.694781
Sum squared resid	0.098257	Schwarz criterion	-2.428150
Log-likelihood	53.15867	Hannan-Quinn criter.	-2.602740
F-statistic	853.5800	Durbin-Watson stat	2.149700
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model

INVENTORY CONTROL AND ITS EFFECT ON THE PERFORMANCE OF SOME SELECTED SMALL-SCALE BUSINESSES IN ABIA STATE

Ogbede Malachy O. and Useh, Udeme F.
Michael Okpara University of Agriculture Umudike, Nigeria
Corresponding author: frmalachyo@gmail.com

ABSTRACT
The study examined inventory control and its effect on the performance of some selected small-scale businesses in Abia State. The specific objectives were to examine the effect of inventory usage management on the productivity of small-scale businesses in Abia State, to ascertain the effect of inventory procurement control on the efficiency of the small-scale businesses in Abia State, to ascertain the impact of periodic inventory control on the performance of the small scale businesses in Abia State. The study population comprised 114 selected workers of small and medium enterprises in Abia State. The sample size for the study was 89 respondents. The stated hypotheses were analyzed with simple regression. Findings revealed that inventory usage management positively and significantly impacts small-scale businesses' productivity. Inventory procurement control has a positive and significant impact on the efficiency of the small-scale businesses in SMEs in Abia State, and periodic inventory control has a positive and significant impact on the performance of the small-scale businesses in SMEs in Abia State. Owners of small-scale businesses in SMEs in Abia State should properly implement inventory control, such as inventory usage management, to enhance their productivity.
Keywords: Inventory control, performance, small-scale businesses, inventory usage management, inventory procurement

INTRODUCTION
Inventory management is the science-based art of ensuring small-scale businesses have enough inventory to meet their needs. It is essential for production, maintenance of equipment and plants, and operational activities. It is also important to control materials and products that need to be stored for later use in case of production or exchange activities in the case of services (Adeleke *et al.*, 2018). Inventory control is the supervision of non-capitalized assets and inventory items. As a part of supply chain management, inventory control oversees the movement of goods from the manufacturer to the warehouse and from the warehouse to the point of sale. An important function of inventory control is to keep a record of every new or returned product that enters or leaves the warehouse. A good inventory control strategy helps to ensure that inventory orders are accurate, leads to a better-organized warehouse, saves money and time, improves efficiency and productivity, and keeps customers and new customers. One variable that measures inventory control is inventory (Adekunle, 2019).
Inventory control is an important management issue for many businesses. Good inventory control in the supply chain is a key factor for effective inventory management and control. Inventory is important in an organization's growth and survival (Akio, 2015). If an organization does not manage its inventory properly, it will lose customers and decrease sales. Proper inventory management helps reduce depreciation, theft, and waste while ensuring the materials are available when needed. Inventory control techniques include Inventory usage management, procurement control, and periodic inventory control. The perpetual inventory system keeps the data on inventory up to date whenever materials are brought into or out of the warehouse or when they are moved from one location to another. This system is preferred because it provides more accurate results (Agu *et al.*, 2016).
Small-scale businesses worldwide, particularly in Nigeria, have faced daily operations challenges. This is especially true in areas where they are dealing with physical items. Poorly implemented inventory control techniques, such as inventory usage management, procurement control, perpetual inventory control, and periodic inventory control, can have a negative impact on the success of these businesses (Amahalu and Ezechukwu, 2017). In Nigeria, small-scale businesses are having difficulty maintaining an efficient performance due to the lack of proper inventory management and marketing to sell. This leads to an increase in inventory holding costs, which worsens business performance in Abia state. Proper management can help reduce inventory costs by reducing waste and storage, leading to efficient inventory turnover and performance improvement (Anshur *et al.*, 2018). Therefore, this study examines the impact of inventory control on the success of certain small-scale businesses. Specifically, it examines the effect of

inventory usage management on productivity, the effect of inventory procurement control on efficiency, and the impact of periodic inventory control on the performance of small-scale businesses in Abia State.

REVIEW OF LITERATURE

Concept of Inventory Control

Inventory control involves monitoring the raw materials needed for manufacturing and working to deliver them according to planned schedules to ensure the continuity of operations and utilization of capabilities, resulting in lower costs and regular deliveries of ready-to-sell products to end-users on defined dates (Anshur *et al.*, 2018). The significance of inventory control comes from the need to determine the economic amount of demand and the point at which to re-order and reduce inventory to as low a level as possible. A project may be capable of accurately determining the quantity of inventory if it operates under static conditions characterized by stable and certain conditions. On the other hand, current and future conditions have the mobility and dynamic nature of irregular conditions, which influence the quality of the raw materials inventory (Amahalu & Ezechukwu, 2017).

Brown (2019) defines inventory control as "a resource held by an organization for future use, such as when inputs and outputs are stored for future consumption by its customers." Inventory control is the process of planning, ordering, and scheduling the materials used in manufacturing processes. It also controls three types of inventory: raw materials, "work-in-process," and "finished goods." Barney, Wright, and Kitchen (2011) define the specific goals of inventory control: Supply products to customers as efficiently as possible and avoid shortages to the greatest extent possible. Supply financial investments in inventories as minimal as possible, i.e., keep working capital blocked to the lowest possible level. Ensure efficient purchasing, storage, consumption, and accounting of materials. Maintain timely records of all items and maintain stock within desired limits. Ensure timely action to replenish inventories. Provide a reserve stock in case of changes in lead times for materials delivery. Provide a scientific basis for short and long-term planning of materials.

Inventory Control Technique

Inventory control technology has evolved to cut across all aspects of manufacturing companies (Pontius, 2020).

Periodic System of Inventory

In the periodic inventory system, inventory data is not recorded daily but at the start and end of the inventory financial period. The periodic system uses a physical method of inventory counting. After the physical count is completed, the purchase account is updated to adjust the final financial statements (Pontius, 2020).

Inventory Procurement

Inventory procurement is the side of the supply chain that deals with identifying suppliers, establishing relationships, and buying and receiving inventory).

Impact of Inventory Control on Organizational Performance.

As mentioned above, inventory control is very important in running any organization. Along with its benefits, it can also have many positive effects on the organization that will greatly impact its performance, like that of Century Bottling Company Limited. Below are some of the impacts that inventory control can have on an organization's performance: Inventory management directly correlates with the cost of running the organization. First, understand the costs associated with inventory management - holding costs (also known as carrying costs) and set-up costs (costs associated with getting a machine set up to produce the good in question, purchasing costs (cost associated with the purchased item itself). Some procurement staff may think purchasing cost is irrelevant to our order decision and can be removed from the equation (Benedict & Margeridis, 2018).

It is important to note that this applies if there is no quantity discount. If there is a quantity discount, the firm must decide whether the savings from the discount are enough to compensate for the loss of savings due to using EOQ (Bowersox, 2020). Several assumptions need to be made when using EOQ: only one product is included. Deterministic demand is known with absolute certainty. Stable demand is constant throughout the year. No quantity discounts, no price increases or inflation. While these assumptions would render EOQ meaningless in a real-world situation, they are relevant for items with independent demand (Bridoux, 2014).

Theoretical Framework

Queuing Theory

Shingo (2005) coined the term "Queuing Theory" to describe the mathematical study of queueing. This theory will help the study examine the relationship between material-handling equipment and efficient inventory management. Queuing theory is the mathematical study of waiting in a line or queue. It allows for the mathematical analysis of the following related processes: getting to the back of a queue, waiting in a queue (storage process), and getting served in front of a queue. Queuing theory allows for deriving several performance measures: average waiting time in a queue or system. The number of people waiting for an organization to receive service probability of encountering a system in certain states (e.g., empty, full, having an available server, and waiting to be served). This theory is based on the fact that it takes a critical look at the organization of resources of a particular firm.

Empirical Review

Ukolobi (2022) examined the influence of advanced technology on the performance of firms and the relationship between labor costs and a firm's performance. The major objectives were to examine whetherthe advanced technology has a positive and significant effect on the performance of manufacturing firms. The hypotheses were tested at a 0.05 significance level and a 95% confidence level. Data was collected from secondary tools and literature on prior work, including studies and survey reports. The data collected was analyzed using the Panel Least Squares regression method. The study examined thirteen (13) industrial goods producer firms listed on the Nigerian Stock Exchange from 2010 to 2018, a nine (9) year period. This study concludes that advanced technology has a positive and significant effect on the performance of manufacturing firms. The study also recommended that manufacturing firms invest in advanced and modern technology to improve operating efficiency and reduce operating costs and delivery costs.

Sonko and Akinlabi (2021) examine the effect of inventory management on the profitability of food and beverage manufacturing companies in Lagos State, Nigeria. The major objectives were to examine the effect on the profitability of selected food and beverage manufacturing companies in Lagos State, Nigeria, and also to examine the inventory management affects the profitability of selected food and beverage manufacturing companies in Lagos State. A cross-sectional survey research design was adopted. The target population comprised 2027 top, middle, and lower-level managers in Lagos State, Nigeria's selected food and beverage companies. A stratified random sampling technique was used for the study. A validated questionnaire was used. Cronbach's alpha coefficients for the constructs ranged from 0.702 to 0.955. Data was analyzed using descriptive and inferential statistics. The findings revealed that inventory management had a significant effect on the profitability of selected food and beverage manufacturing companies in Lagos State, Nigeria (Adj. $R2 = 0.538$, $F (4, 351) = 104.185$, $p < 0.05$). Thus, The study recommended that companies put proper inventory management techniques in place to avoid delays and wastage and increase overall profitability.

Olowolaju (2020) investigates the effect of inventory management practices on the organizational performance of small and medium-sized enterprises (SMEs) in Akure Metropolis, Ondo State, Nigeria. The study's specific objectives are to identify the inventory management techniques used in the selected SMEs, assess the factors affecting the nature of inventory management practices adopted by the selected enterprise, and evaluate the effects of inventory management practices on the profitability of the selected enterprise. The study combined primary survey-based data with secondary information from SMEs in Akure Metropolis. The study area population comprised 966 registered SMEs in Akure Metropolis, Ondo State, Nigeria. Four hundred sample sizes were obtained in this study using a multi-stage sampling technique. Primary and secondary data were quantitatively obtained using a well-structured questionnaire, and profit data from the selected SMEs in the study area was also implemented. The data collected were analyzed with descriptive and inferential statistical tools, respectively. The analysis of the result showed that the perception of the respondents towards planning and procurement was favorable. The hypothesis testing result of ($r = 0.225$ and $P \leq 0.05$) obtained with Pearson Product moment correlation revealed a positive and significant relationship between the inventory management techniques and the profitability level of the selected SMEs in the study area.

Yakubu *et al*. (2018) examine the impact of Inventory Management and Financial performance of selected quoted firmsin Nigeria. The study has been conducted in different parts of the globe and in Nigeria, with different findings that are mixed and inconclusive. The population of the study consists of ten (10) firms quoted on the Nigerian stock exchange as of 31st December 2018, out of which ten (10) firms were selected as samples for a period of seven (7) years from 2012 to 2018 based on purposeful sampling

technique. The study uses multiple regressions as a tool for analysis. The study reveals that the inventory turnover ratio positively impacted the financial performance of selected quoted firms in Nigeria.

METHODOLOGY

The study adopted a descriptive survey research design. The study population comprised 114 select workers of small and medium enterprises in Abia State (SME's Office, Abia State). Data for this study was obtained from primary data using a questionnaire. To obtain the sample, the researcher employed the Taro Yamane formula, given as follows:

$$n = \frac{N}{1+N(e)2}$$

Where

N = The total population,

e = The error margin,

n = sample size,

$$n = \frac{114}{1+114(0.05)2}$$

$$n = \frac{114}{1+114(0.0025)}$$

$$n = \frac{114}{1+0.285}, \quad n = \frac{114}{1.285}, \quad n = 89$$

The study employed mixed statistical methods, such as descriptive statistics and a simple regression model. The regression model shows the cause and effect of two or more variables.

The hypotheses are **stated below**

.Y =

$F(X_1)$……………………………………………………………………1

$Y = \beta_0 + \beta_1 X_1 + ei$ ………………………………………………

….2

RESULTS AND DISCUSSION

Return Rate of Questionnaire

Here, the researcher examined the total number of questionnaires issued and returned by the respondents of this study.

Table 1 Return Rate of Questionnaire

Respondents	Distributed questionnaire	Returned questionnaire	Wrongly filled	Properly filled	%	Not Returned	%
SMEs	89	85	5	80	90	5	5.6
Total	89	85	5	80	90	5	5.6

Source: Field Data, 2023

Table 1 above shows that eighty-nine (89) questionnaires were issued to small and medium-scale enterprises in Abia State, and eighty-five (85) questionnaires were completed and returned. In effect, five (5) of the questionnaires were not returned. In collecting the data, it was discovered that five (5) questionnaires were wrongly filled and discarded accordingly. In effect, eighty (80) of the respondents constituted the sample, which translates into an 80% rate of return completed questionnaire.

Research Question 1

How does inventory usage management affect the productivity of small-scale businesses in Abia State?

Table 2

Inventory usage management effect on productivity	**SA**	**A**	**N**	**D**	**SD**	**Total**	**$\bar{X}$**	**Decision**
Planning enhances the productivity of small-scale businesses in Abia State	40	30	5	3	2	345	4.3	Agreed
Ordering enhances the productivity of small-scale businesses in Abia State	36	25	9	6	4	323	4.0	Agreed
Schedulingenhances productivity of the small-scale businesses in Abia State	38	32	7	2	1	348	4.4	Agreed

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data in Table 2 indicated the respondents' responses on the effect of inventory usage management on the productivity of small-scale businesses in Abia State. The result revealed that all the items were above the acceptance benchmark of 3.00, which shows that the respondents accepted all the items and that inventory usage management affects on productivity of small-scale businesses in Abia State.

Research Question 2

How does inventory procurement control affect the efficiency of small-scale businesses in Abia State

How does inventory procurement control affect the efficiency of small-scale businesses in Abia State?	**SA**	**A**	**N**	**D**	**SD**	**Total**	**$\bar{X}$**	**Decision**
Efficient purchasing enhances the efficiency of the small scale businesses in Abia State	45	30	3	1	2	358	4.5	Agreed
Adequate storage enhances the efficiency of small-scale businesses in Abia State	36	25	9	6	4	323	4.0	Agreed

Table 3

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data in Table 3 indicated the respondents' responses on inventory procurement control affect the efficiency of small-scale businesses in Abia State. The result revealed that all the items were above the acceptance benchmark of 3.00, which shows that the respondents accepted all the items and that inventory procurement control affects the efficiency of small-scale businesses in Abia State.

Research Question 3

What is the impact of periodicinventory control on the performance of small-scale businesses in Abia State?

Table 4

What is the impact of periodicinventory control on the performance of small-scale businesses in Abia State?	**SA**	**A**	**N**	**D**	**SD**	**Total**	**$\bar{X}$**	**Decision**
Updating the company's information enhances the performance of small-scale businesses	36	30	7	4	3	332	4.2	Agreed
Quantity information or enhance the performance of the small scale businesses	36	25	9	6	4	323	4.0	Agreed

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data in Table 4 indicated the respondents' responses on the impact of periodic inventory control on the performance of small-scale businesses in Abia State. The result revealed that all the items were above the acceptance benchmark of 3.00, which shows that the respondents accepted all the items. The impact of periodic inventory control on the performance of the small-scale businesses in Abia State.

Test of Hypotheses

Test of Hypothesis One

$H0_1$:Inventory usage management has no significant effect on the productivity of the small-scale businesses in Abia State

Table 5: For hypothesis 1, we specify simple regression, thus;

Variable	Parameters	Coefficient	Std Error	t – value
Constant	β_0	1.201	0.110	10.9***
Inventoryusage management (X_1)	β_1	1.775	0.213	8.33***
R-Square	0. 64			
Adjusted R^2	0.60			
F-statistic	10.9***			

*****, **, and * denotes significance of coefficient at 1%, 5%, and 10% level respectively**

Source: Field Survey, 2023. (SPSS Vision 20)

The result shows the impact of inventory usage management on the productivity of small-scale businesses. The result of the coefficient of multiple determination (R^2) was 0. 64, which implies that changes in the independent variable explained 64% of the variations in the dependent variable, while 36% were unexplained by the stochastic variables, indicating goodness of fit of the regression model. The coefficient of inventory usage management was statistically significant and positively related to the productivity of the small-scale businesses in SMEs in Abia State at 1 percent.This implies that a unit increase in inventory usage management led to an increase in the productivity of small-scale businesses by 1.775 units. The F-value of (10.9***) shows that the result was statistically significant. We conclude that inventory usage management has a positive and significant impact on the productivity of small-scale businesses.

Test of Hypothesis Two

$H0_2$: Inventory procurement control has no significant effect on the efficiency of small-scale businesses in Abia State

Table 6: For hypothesis 2, we specify simple regression, thus;

Variable	Parameters	Coefficient	Std Error	t – value
Constant	β_0	1.318	0.219	6.02***
Inventory procurement control (X_1)	β_1	1.657	0.135	12.27***
R-Square	0. 76			
Adjusted R^2	0. 74			
F-statistic	14.1***			

*****, **, and * denotes significance of coefficient at 1%, 5%, and 10% level respectively**

Source: Field Survey, 2023. (SPSS Vision 20)

The result shows the impact of inventory procurement control on the efficiency of small-scale businesses. The result of the coefficient of multiple determination (R^2) was 0. 76, which implies that changes in the independent variable explained 76% of the variations in the dependent variable, while 24% were unexplained by the stochastic variables, indicating goodness of fit of the regression model. The coefficient of inventory procurement control was statistically significant and positively related to the efficiency of the small-scale businesses in SMEs in Abia State at 1 percent.This implies that a unit increase in inventory procurement control led to an increase in the efficiency of small-scale businesses by 1.775 units. The F-value of (14.1***) shows that the result was statistically significant. We conclude that inventory procurement control positively and significantly impacts the efficiency of small-scale businesses in SMEs in Abia State.

Test of Hypothesis Three

H0$_4$: Periodic inventory control has no significant effect on the performance of the small scale businesses in Abia State

Table 7: For hypothesis 3, we specify simple regression, thus;

Variable	Parameters	Coefficient	Std Error	t – value
Constant	β_0	1.743	0.135	12.9***
Periodic inventory control (X_1)	β_1	1.894	0.116	16.3***
R-Square	0. 66			
Adjusted R^2	0. 62			
F-statistic	15.1***			

*****, **, and * denotes significance of coefficient at 1%, 5%, and 10% level respectively**

Source: Field Survey, 2023. (SPSS Vision 20)

The result shows the impact of periodic inventory control on the performance of small-scale businesses. The result of the coefficient of multiple determinations (R^2) was 0.66, which implies that changes in the independent variable explained 66% of the variations in the dependent variable. In comparison, 36% were unexplained by the stochastic variables, indicating goodness of fit of the regression model. The coefficient of periodic inventory control was statistically significant and positively related to the performance of the small-scale businesses in SMEs in Abia State at 1 percent.This implies that a unit increase in periodic inventory control led to an increase in the performance of small-scale businesses by 1.894 units. The F-value of (15.1***) shows that the result was statistically significant. We conclude that periodic inventory control has a positive and significant impact on the performance of small-scale businesses in SMEs in Abia State.

Discussion of Result

The study examined inventory control and its effect on the performance of some selected small-scale businesses in Abia State. The study was analyzed under the following stated hypotheses. The result of the first stated hypothesis revealed that inventory usage management positively and significantly impacts small-scale businesses' productivity. This result only holds that any small-scale business's inventory usage management is effectively used and will enhance the productivity of small-scale businesses in the state.Also, the result of the second stated hypothesis revealed that inventory procurement control positively and significantly impacts small-scale businesses' efficiency in SMEs in Abia State. The result is that proper implementation of inventory procurement control by owners of small-scale businesses will enhance their efficiency. Finally, the result revealed that periodic inventory control has a positive and significant impact on the performance of small-scale businesses in SMEs in Abia State. This result shows that properly implementing periodic inventory control will enhance the performance of small-scale businesses in SMEs in Abia State.

CONCLUSION

The wrong application of inventory control techniques such as (inventory usage management, inventory procurement control, perpetual inventory control, and periodic inventory control) by managers or owners of small businesses in Abia state may have an adverse effect on the performance of businesses. Businesses in Nigeria are facing challenges with maintaining an effective performance. This is because most Small-scale businesses need to maintain proper inventory by maintaining optimum inventory and proper marketing to sell inventory. This problem tends to increase inventory holding costs, which deteriorates the performance of small-scale businesses in Abia State. Proper management is an effective step in reducing the cost of inventory through minimizing waste and storage costs, thereby promoting efficient inventory turnover and an increase in performance. Hence, the study examined inventory control and its effect on the performance of some selected small-scale businesses in Abia State. The findings of the study revealed that inventory usage management has a positive and significant impact on the productivity of small-scale businesses, inventory procurement control has a positive and significant impact on the efficiency of the small scale businesses in SMEs in Abia State, and periodic inventory control has a positive and significant impact on the performance of small scale businesses in SMEs in Abia State. Based on the following, the study recommends that owners of small-scale businesses in SMEs in Abia State properly implement inventory control, such as inventory usage management, to enhance their productivity. In addition, owners of small-scale businesses in SMEs in Abia State should also implement inventory procurement control effectively to enhance their efficiency. Finally, owners of small-scale businesses in SMEs in Abia

State should, as a matter of urgency, adopt periodic inventory control in their production process to enhance the performance of the small-scale businesses in SMEs in Abia State.

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DETERMINANTS OF EXPORT IN NIGERIA: EVIDENCE FROM CROSS-SECTIONAL SECONDARY ENTERPRISE SURVEY DATA

Okereke Obinna S., Uwazie, Iyke Uwazie and Alugbuo Justin
Department of Economics, Michael Okpara University of Agriculture, Umudike Umuahia

ABSTRACT
This study examines the determinants of exports in Nigeria, but specifically, the present investigation analyzed the variables that significantly influence the determination of manufacturing firms' exports and factors that determine manufacturing export earnings in Nigeria. The study employed a cross-sectional secondary enterprise survey data of Nigeria for 2014 using Logistic and Tobit regression models. The research scope covers 2676 manufacturing firms in Nigeria as a whole. Findings from the study show that total sales, the experience of the firm head, labor, age, and export subsidy are significant determinants of export and export earnings in Nigeria, given that the Z-value and probability values of each of the variables are greater than 1.96 and less than 0.05 P-value at 5% significance level. In contrast, sex of firm head, education of firm head, and location of firm head are insignificant determinants of export and export earnings in Nigeria. The study further recommends that since export is a key driver of economic growth, firms should increase productivity (total sales) to enable them to export. Again, the government should give more subsidies to manufacturing firms as an incentive to produce more and export their goods.
Keywords: Determinants, export, export earnings, cross-sectional, export subsidy, manufacturing, firm head, logistic and Tobit regression model

INTRODUCTION
According to the Organizational Effectiveness Committee report (OEC, 2016), Nigeria is ranked the 51st most export-oriented economy in the world, having imported goods worth $35.1 billion and exported goods worth well above $36.9 billion, resulting in a trade surplus of $1.81 billion in 2016. Nigeria's top export destinations are India, the United States, Spain, France, and South Africa. Export in Nigeria jumped from NGN 995.3 billion in June 2017 to 1482.2 billion in June 2018, which was boosted by higher sales of 8.3% of agricultural products, 59.8%of crude oil, 203.5% of solid minerals, 10.7% of manufactured goods, 14% of Energy, and 8.5% of raw materials. Natural gas and oil are the main factors behind Nigeria's growth, accounting for more than 91% of total exports. In 2014, 43% of Nigeria's sales went to Europe, 29% to Asia, 13% to America, and 12% to Africa.
Studies provide evidence of the positive correlation and strong causality between foreign trade and economic growth and development (Balassa & Bauwens, 1987; Sharma, 2001; Adegbemi *et al.*, 2012). With the help of trade, countries can break the traditional chains of detachment and win friends, as trade is similar to an engine of economic growth (Smith, 1776). Investment in technology, mainly at the firm level, is a critical input that enables capacity for export (Adeoti, 2008). The relevance and importance of export trade in any country cannot be overemphasized (mercantilist theory), and the growth of any nation depends on its ability to produce export goods to earn foreign exchange. To Smith (1776), the true wealth of a nation is not measured in terms of money but in its production of goods and services.
According to the export-led growth (ELG) theory, economic growth driven by exports generates foreign exchange earnings that help alleviate balance of payment pressures and create employment opportunities. An ELG strategy aims to establish export incentives that leverage modern technology to enable producers to access and compete in the global market. Exports have the potential to enhance intra-industry trade, integrate the domestic economy into the global economy, and shield it from external shocks. The booming economic transformation of the Asian and Latin American countries, which were export-led, validated the important role that exports play in the economic growth and development process (About-Stait, 2005).
Unfortunately, firms in Nigeria have exhibited a relatively low export performance, particularly since the 1970s when crude oil emerged as the primary source of export revenue. As stated by Thoburn (2000), Afangideh, Udoma, and Goiora (2004), the share of manufactured export in total export increased in the 1960s and began to decline in the 1970s (especially after the first oil shock in 1973) through to the 1990s. Despite the halt in the decline, it has maintained a relatively low level. There is no sign that the recovery process has achieved substantial proportions, as the manufacturing sector in Nigeria still depends heavily on the import of machinery/equipments indicative of the relatively under-developed state of the engineering subsector (NPC, 2007).
Utilizing the information gathered from different editions of the Statistical Bulletin of the Central Bank of Nigeria, Abuja, it is clear that, although the proportion of manufactured items in overall merchandise

imports is notably high (66% in 2006), the corresponding share of manufactures in total merchandise exports is extremely low (2% in 200s) and even lower in preceding years. This indicates a significant lack of international competitiveness within the manufacturing sector.

While the export levels of manufacturing firms in Nigeria remain elevated alongside an increase in manufactured output, firm-level investigations into the factors influencing manufacturing export levels in the country are few. Adeoti (2008) has pinpointed firm size and various technology-related factors, including skills intensity, investment in skills enhancement, cost efficiency, and investment in quality management, as pivotal elements determining the export potential of firms. Studies in developing countries like Nigeria often rely on cross-country data rather than country and firm-level data, leading to limited knowledge about the determinants of manufacturing exports. This raises the pertinent policy question: "What factors contribute to a firm's export level?and determinants of export earnings in Nigeria?

LITERATURE REVIEW

As per the Business Dictionary, export constitutes a vital element in international trade, closely associated with import. It involves the sale of goods and services produced in one country to residents of another country. The nature of the good or service, the mode of transportation, and whether it is domestically produced or sent abroad are inconsequential; its classification as an export matter. A trade surplus occurs when a country exports more than it imports, whereas a trade deficit arises when imports surpass exports. In international trade, exporting refers to sending goods or services produced in one country to another, often involving surplus products sold globally (Sajo & Li, 2017), and those responsible for selling such commodities are known as exporters.

Countries export goods and services in areas with a competitive advantage, showcasing their proficiency in providing specific products. This concept aligns with David Ricardo's comparative advantage theory from the 19th century, emphasizing that countries excel in producing commodities for which they have a natural ability. The desire to boost exports is widespread among nations, driven by the objective of selling beyond their domestic market. This expansion enhances their competitive advantage, fosters expertise in production, and cultivates knowledge of selling in foreign markets (Amadeo, 2019). Governments actively promote exports due to the associated benefits such as job creation, elevated wages, improved living standards, and enhanced public support for national leaders (Acemoglu & Zilibotti, 1997).

According to Adam Smith, a country's export is another country's import. Export growth has the potential to broaden economies of scale, resulting from market size expansion through resource allocation efficiency and the competitiveness of exporting firms. Increased exports also positively impact aggregate output by alleviating foreign exchange constraints. Additionally, export expansion stimulates technical change and investment, leading to demand spillover into other sectors of the economy. This process accelerates growth by providing the foreign exchange necessary for producing capital goods and other intermediate goods essential for sustaining industries. International trade's increased role in generating economic growth is evident through the diffusion of knowledge and technology from directly importing high-tech goods. Trades further encourage integration with innovation sources and amplify gains from foreign direct investment. By enlarging the market size, trade openness enables economies to capitalize on the potential benefits of increasing returns to scale and economies of specialization (Sajo & Li, 2019).

Theoretical Framework

Export-led Growth Theory

The theory of export-led growth, also known as export-oriented industrialization or export-substitution industrialization, is an economic policy focused on expediting a country's industrialization by exporting goods with a comparative advantage. This strategy involves opening domestic markets to foreign competition in exchange for market access in other countries. Notably exemplified by the development of the Asian Tigers—Taiwan, Hong Kong, South Korea, and Singapore—after World War II, this approach often incorporates measures like reduced tariff barriers, a floating exchange rate, and government support for exporting sectors to promote economic development (Emilio, 2000).

Export-led growth is a deliberate policy strategy through which a country seeks to enhance its economic growth by expanding its exports. The objective is to realize various growth-related benefits, including employment generation for previously unemployed or underemployed resources, increased capital accumulation, and technological advancement through more significant exports. The theory posits that a country's economic development can be stimulated by augmenting the quantity and quality of its productive resources and optimizing their utilization. It also entails a more productive allocation of resources, thereby accelerating economic growth.

The ongoing debate revolves around whether a country can effectively rely on an export-led growth strategy. International financial institutions such as the IMF, World Bank, and Asian Development Bank, along with economists like Sachs and Werner, advocate for export-led growth by citing successful cases in East Asian countries. This economic strategy is implemented by certain developing countries aiming to carve out a niche in the global economy for specific exports. Industries producing these exports may receive governmental subsidies and improved access to local markets. Export-led growth entails a substantial portion of real GDP expansion, job creation, and per capita income increase resulting from the successful exportation of goods and services between countries.

Theory of Mercantilism

Mercantilism, a term popularized by the father of economics, Adam Smith, in his seminal work "The Wealth of Nations," was implemented in the English colonies through the Navigation Acts and prevailed as the dominant economic system in England from the 16th to the 18th century. This theory, which posits that countries should promote exports and impede imports, asserts that a nation's wealth hinges on the balance of exports minus imports. It emerged as a response to economic challenges when states lacked the strength to guide their economies, and each town or principality imposed tariffs on goods crossing its borders. The foundational belief of this theory is that wealth is finite, suggesting that if one nation prospers, it does so at the expense of others (Smith, 1776).

According to this perspective, governments play a pivotal role in the economy by encouraging exports and discouraging imports through subsidies and taxes. Additionally, mercantilism promotes using gold as a medium of trade between countries. The theory recognizes that certain commodities can be obtained more affordably from other regions, encouraging exports. The fundamental principle behind trade between regions is the disparity in commodity prices. Unlike the classical theory, mercantilism presents a more realistic model, fostering complete specialization in producing one commodity by one country and another, thus engaging in trade.

Empirical Literature Review

In a thorough investigation, Ashkan and Azadeh (2015) researched the impact of determinant factors on Export Volume in Iran, employing data from 1961 to 2001; the study affirmed the significant role of pricing and non-pricing variables in stimulating the export activities of the examined country. Notably, the study observed a negative impact of external shocks, particularly on industrial goods exports.

Nahanga and Vera (2016) delved into the influence of agricultural exports on economic growth in Nigeria, utilizing OLS regression, Granger causality, Impulse Response Function, and Variance Decomposition approaches. Both OLS regression and Granger causality results supported the hypothesis that agricultural exports contribute to economic growth in Nigeria. However, they identified an inverse relationship between the degree of agricultural openness and economic growth. The Impulse Response Function results exhibited fluctuations, indicating upward and downward shocks from agricultural exports to economic growth. Variance Decomposition results highlighted that a shock to agricultural exports could contribute to long-term fluctuations in the variance of economic growth. The study recommended encouraging domestic processing industries and discouraging the import of agricultural commodities that Nigeria could process economically to achieve a favorable trade balance in agricultural trade.

Muhammad (2017) investigated the determinants of export competitiveness in Pakistan, adopting the revealed comparative advantage method. The study revealed structural and recurrent changes in Pakistan's external sector, accompanied by a substantial increase in port demand due to economic growth.

Grenier et al. (2006) examined the determinants of exports and investment of manufacturing firms in Tanzania using data from 83 firms. The study found that larger firms are more inclined to export than smaller ones, and larger firms are more likely to sustain their investments than smaller ones. Additionally, irrespective of firm size, those firms that sustain investment are more likely to engage in export activities than those that do not sustain investment.

METHODOLOGY

Theoretical Framework

Economists have explored various theories to elucidate international trade, with the neoclassical Heckscher-Ohlin model traditionally holding sway (Dijk, 2002). According to this model, countries specialize in producing and exporting goods for which they possess a comparative cost advantage due to the relative abundance of a specific factor of production. In the case of a typical developing country, abundant in labor but deficient in capital, this would entail exporting labor-intensive goods like textiles. Conversely, industrialized nations would export capital-intensive goods. However, the Heckscher-Ohlin model relies on stringent assumptions such as perfect competition, the absence of economies of scale, and

the costless availability of technology to reach its conclusions. In the 1980s, the emergence of the so-called new or strategic trade theory relaxed some of these assumptions, allowing for alternative sources of comparative advantage. Various models were developed wherein imperfect competition and economies of scale-shaped international trade patterns.

Furthermore, neo-technology or technology-gap theories underscore the significance of technology in shaping international trade patterns (Adeoti, 2008). Innovation, specialization, and learning are the primary determinants of comparative advantage in this literature. While these theories typically explain trade patterns between countries, they also offer valuable insights into explaining exports at a more granular level. Prior empirical research has demonstrated that comparative advantage in costs, economies of scale, perfect competition, and technology are crucial determinants of exports at both the firm and sectoral levels.

Model Specification

Model Specification for First Objective

A Logit regression model was used to analyze the factors determining whether manufacturing firms export. The Logit model follows the normal distribution of Z-statistics for references, which is as adopted from Gujarati (2009) and is specified as:

$$Pt = \frac{P_t}{1-P_t} = \frac{1+e^{zt}}{e^{zt}} = e^{zt} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 1$$

Where $z_t = \beta_1 + \beta_2 Xi$

Equation 1 represents the cumulative logistic distribution function. We can verify that as Zj ranges from **—oo**to **+ oo**, *P[* ranges between 0 and 1, and *Pi* is nonlinearly related to z_t

If *Pi,* the probability of firm exporting, is given by equation 3.3.2, then (1 — *Pi),* the probability of firm not exporting, is given as

$$\frac{P_t}{1-P_t} = \frac{1+e^{zt}}{e^{zt}} = e^{zt} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 2$$

We can, therefore, write

$$\frac{P_t}{1-P_t} = \frac{1+e^{zt}}{e^{zt}} = e^{zt} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3$$

$\frac{pt}{1-pt}$is the **odd ratio**in favor of exporting, and taking the natural log of equation 3.3.3, we obtain,

$$\frac{P_t}{1-P_t} = \frac{1+e^{zt}}{e^{zt}} = e^{zt} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 4$$

$_{It}$remains as defined above

For the sake of this study, the logit model is given as:

$$Li(x) = in \frac{P_t}{1-P_t} = \beta_1 + \beta_2 + \beta_3 L + \beta_4 AOF + \beta_5 SOFH + \beta_5 EFH + \beta_6 EFH + \beta_7 ESFH + \beta_8 F + \beta_9 XS + \beta_{10} LOF + \mu i \ldots\ldots\ldots 5$$

Where; X= export (dependent variable), 1 for firm exporting and 0 for otherwise; TS=total sales

L= labor; AOF= age of firm in years; SOFH= sex of firm head, 1 if male and 0 for otherwise

EFH= Experience of firm head; F= Certification of firm. 1 if registered and 0 for otherwise

XS= Export subsidy, 1 if firm received an export subsidy, 0 for otherwise; LOF= Location of the firm, 1 if located in the export processing Zone, 2 for the industrial park, and 3 for others; and *Ui*= error term

The explanatory variables adopted are based on empirical and theoretical literature.

Model Specification for Second Objective

The Tobit model was used to ascertain Nigeria's export earnings' determinants. The model supposes that there is an unobservable variable (Y) that linearly depends on the independent variable (Xj) via a parameter (p), which determines the relationship between the dependent (Yi) variable and the independent variable (X). In addition, there is a normally distributed error term (u_t) to capture random influences on this relationship. The observable variable is the Ramp function, which is equal to the latent variable whenever the latent variable is above zero and otherwise zero. The Tobit model is adopted from Gujarati (2009) and is statistically modeled as follows:

$$Y_i = \beta_1 + \beta_2 Xi + \mu_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (6)$$

If the right-hand side (RHS) is >0, or otherwise if RHS = 0. That is:

$$Yi = (y^{yi\ if\ yi>yl}_{yl\ if\ yi\leq yl}$$

Where Y is a latent variable.

From equation 6, the coefficient should not be interpreted as the effect of X* on Yi; instead, it should be interpreted as the combination of the change in Yj of those above the limit, weighted by the probability of being above the limit; and the change in the probability of being above the limit, weighted by the expected value of Yj, if above.

In writing out the likelihood and log-likelihood function when the Tobit model is centered from below $y_j \leq Y_1$, we have an indicator function where;

$Yi = (y^{yi \text{ if } yi>yl}_{yl \text{ if } yi \leq yl}$

Let be the standard normal cumulative distribution function and ^ be the standard normal probability density function. For a data set with *N* observations, the likelihood function for a Tobit is, and the log-likelihood is given in this context, the Tobit model to be used is given as:

$XER = \beta_1 + \beta_2 TS + \beta_3 L + \beta_4 AOF + \beta_5 SOFH + \beta_e EFH + \beta_7 ESFH + \beta_8 F + \beta_9 ES + \beta_{10} LOF + u_i$ … 7

Where XER is the Export earnings ratio and is the dependent (latent) variable

TS= total sales; L= labour; AOF= firm age in years; SOFH= sex of firm head, 1 if male and 0 for otherwise EFH= Experience of firm head; ESFH= Educational status of firm head; F= Certification of firm. 1 if registered, 2 for located in the industrial park, and 3 for others; XS Export subsidy; 1 for if firm received a subsidy and 0 otherwise; LOF= Location of the firm, 1 if located in export processing Zone, 2 if located in an industrial park, and 3 for none of the above.

A priori Expectation

Table 1: A Priori Expectations for Objective One

Variable	Description	Category	Expected Sign for Objective One
Total Sales	Productivity of firm	Continuous	+
Labor	The number of employees	Continuous	+
Age of firm	Age in years of firm	Continuous	+
Sex of firm head	1 if male. 0 otherwise	Dummy	-/+
Experience of firm head	Knowledge and years of experience of firm head	Continuous	+
Educational status of firm head	The highest level of the top manager's education.	Continuous	+
Formal	Certification of the firm. 1 for registered and 0 for otherwise	Dummy	-/+
Export subsidy	Did the firm receive any export subsidy from the government? 1= those that received 0= otherwise	Dummy	-/+
Location of firm	1 for firms located in export processing zones, 2 for those located in industrial parks, and 3 for none of the above.	Dummy	-/+

Source: Researchers' computation

Table 2: A priori Expectation for Second Objective

Variable	Description	Category	Expected Sign For Objective Two
Total Sales	Productivity of firm	Continuous	+
Labor	The number of employees	Continuous	+
Age of firm	Age in years of firm	Continuous	+
Sex of firm head	1 if male. 0 otherwise	Dummy	-/+
Experience of firm head	Knowledge and years of experience of firm head	Continuous	+
Educational status of firm head	The highest level of the top manager's education.	Continuous	+
Formal	Certification of the firm. 1 for registered and 0 for otherwise	Dummy	-/+
Export subsidy	Did the firm receive any export subsidy from the government? 1= those that received 0= otherwise	Dummy	-/+
Location of the firm	for firms in export processing zones, for if located in an industrial park, 3 for none of the above.	Dummy	-/+

Source: Researchers compilation

Description of Variables

X: X, which means export, means goods and services produced in one country and purchased by residents of another country (Amadeo, 2018). This serves as the dependent variable for the first objective of this study and is dichotomous, with 1 for firm exporting and 0 for otherwise.

XER: This means Export earnings ratio. It is the ratio of earnings a firm makes for providing goods for export and should be non-negative. That is, greater than or equal to zero. XER is the dependent variable for the second objective of this study.

TS: This means total sales and is one of the independent variables used in the model. It measures the total sales made in the firm in order to determine its contribution to economic growth.

EFH: It means the experience of the firm head. It is an independent variable in the model. It Measures the years of experience the top manager has working in that sector.

ESFH: It means the educational status of the firm head. It is one of the independent variables in the model. It measures the effect of formal training of the firm head and the accumulation of skills or knowledge resulting from education or participation in other activities on the productivity of firms by considering the highest level of education of the top manager.

L: It means labor. It is one of the independent variables in the model proxied by the number of employees in a firm and is a general indicator of the strength of a plant's resource base. This has a positive relationship with export and export earnings as larger plants have more resources to enter foreign markets. This may be particularly important if there are fixed costs to exporting, such as information gathering or economies of production or marketing, which may benefit larger firms disproportionately. In the empirical literature, Pfaffermayr (1996) justifies the positive impact of the labor force on exports.

SOFH: This is a dummy variable for the sex of the firm head. It measures 1 for male-headed firms and 0 otherwise.

AOF: This is another independent variable, which means the age in years of the firm. The nexus between age and exports is equivocal. Older plants might have higher export propensities because they are more experienced with international trade. In contrast, newer plants are expected to export more because they use relatively modern technology, which increases productivity and product quality. Older firms may have had time to establish and expand their distribution networks and position themselves to tap export markets. In addition, mature firms may have accumulated considerable knowledge stocks (Baldwin, 1988).

On the other hand, core capabilities can become core rigidities or competence traps, and younger firms may be more proactive, flexible, and aggressive. Relatively younger firms may utilize more recent technology, while older firms are stuck with obsolete physical capital. We included age to capture

potential changes in the firm's quality, as models of learning suggest (Jovanovic, 1982; Hopenhayn. 1992).

F: This means Certification of the firm. It shows the firm's stand regarding authorization from the government. The model's dummy variable is 1 for if registered and 0 for otherwise.

XS: This means export subsidy and is also an independent variable. It measures whether firms receive any export subsidy from the government and how this affects their export earnings and their decision to export.

LOF: Suggests the firm's location, which is defined as a dummy variable that takes on a value of unity (1) if the firm is located in the export processing zone and 0 otherwise. This dummy variable captures factors influencing transport costs, infrastructure, and business services (Graner & Isaksson, 2002).

The data set employed in this study is cross-sectional secondary data that covers Nigeria as a whole and is sourced from the 2014 Nigeria Enterprise survey by the World Bank.

Estimation Technique

As previously stated in the model specification of this study, the logit model, due to its accuracy in estimating dichotomous dependent variables, will be used to ascertain the factors that determine whether a firm exports, which is the first objective of this study. Similarly, the Tobit model proposed by Tobin James was adopted to determine export earnings.

RESULTS AND DISCUSSION

Table 3: Summary Descriptive Statistics of Variables

Variable	Mean	StandardDeviation	MinimumValue	MaximumValue
Export	0.490284	0.499999	0	1
Age of firm	16.99753	12.51041	0	168
Total Sales	14.82842	2.484066	9.615806	27.63102
Labor	40.91186	216.1998	0	5000
Sex of firm head	1.882465	0.3221182	1	2
Experience of firm head	15.34479	8.080615	0	72
Educational status of firm head	5.398444	1.854161	1	11
Formal	.8886398	.3146365	0	1
Export subsidy	1.80943	.3929435	1	2
Location of firm	2.613487	.6030403	1	3
Export earnings ratio	46.91583	29.86844	0	100

Source: Researcher's computation using STATA 13

Result Presentation and Discussion of Findings

Logistic Regression Results and Interpretation

Table 4: Logistic Regression Results:

The dependent variable is Export (1 for firm exporting, 0 for otherwise)

Variable	Coefficient	Standard Error	Odds-Ratio	Standard Error	Z-Value	Prob. Value
Total sales	1.038799	0.1032534	2.825822	0.2917757	10.06	0.000
Labor	0.0027764	0.0011039	1.00278	0.0011069	2.52	0.012
Formal	0.00212412	0.5828626	1.002126	0.584102	0.000	0.0997
Age	-0.1125929	0.0152405	0.8935143	0.136176	-7.39	0.000 -
Sex of firm head	-0.3840585	0.4002493	0.6810916	0.2726065	-0.96	0.337
Export subsidy	-6.375068	0.8475099	0.0017035	0.014437	-7.52	0.000
Location of firm. For industrial park	0.645627	0.466407	1.907182	0.8895233	1.38	0.166
For none of the above	-0.4889963	0.453463	0.6132416	0.2780824	-1.08	0.281 !
Education of firm head.	0.1251782	0.704046	1.13335	0.797931	1.78	0.075
Experience	0.0345235	0.149526	1.035235	0.0154779	2.31	0.021

Source: Researcher's computed result using STATA 13

The table above shows 5 significant variables that determine whether firms export in Nigeria: total sales, labor, export subsidy, the experience of the firm head, and the firm's age.

According to the rule of thumb, a variable is statistically significant if the Z-value is greater than 1.96 and the probability value is less than 0.05 at a *5%* significance level (95% confidence interval), i.e., Z> 1.96 and

P-z< 0.05. The Z-value is measured in absolute values and must be greater than or equal to 1.96 to be statistically significant at the given significance
level. The logistic regression in Table 1 shows the coefficients (log of odds) and the antilog (odds ratio). Hence, if the odds ratio is less than one, it implies that the relationship is negative, but if it is greater than one, it is positive.However, all other variables held constant; a unit increase in total sales of the firm increases the odds in favor of exporting by 2.825822 and is statistically significant at a 5% significance level given that a z-value of 10.06 is greater than 1.96 and a probability value of 0.000 is a less than 0.05. The sign of these total sales conforms to the a priori expected sign.A unit increase in labor significantly increases the log of odds and odds ratio in favor of exporting by manufacturing firms at a 5% significance level, given that the Z-value of 2.52 is more significant than 1.96 and the probability value of 0.012 is less than 0.05. This is also in line with the a priori sign.For the variable formal, which is dummy (1 for registered and 0 otherwise), the log of odds and odds ratio in favor of exporting by registered manufacturing firms is greater than otherwise by 0.00212412 and 1.002126, respectively. It is statistically insignificant at a 5% significant level given that the Z-value of 0.00 is less than 1.96 and the probability value of 0.0997 is greater than 0.05 at a 5% significant level. This is justified since registered and certified firms have the legal backing to export and, therefore, have more edge over certified firms. All other variables held constant; a year increase in the age of the firm significantly decreases the odds in favor of exporting by the manufacturing firm by 0.8935143, given that an absolute Z-value of 7.39 is greater than 1.96 and a probability value of 0.000 is less than 0.05 at 5% significance level. For the variable sex, which is a dummy (1 for male and 0 otherwise), all other variables held constant; the odds in favor of exporting by the male-headed firm is insignificantly lower than otherwise by 0.6810916 given that the absolute Z-value of 0.96 is less than 1.96 and the probability value of 0.337 is greater than 0.05 at 5% significant level. The resultant sign does not conform to the expected sign. For the variable export subsidy, which is a dummy, 1 for those that received a subsidy and 0 otherwise), if other variables are held constant, the odds in favor of exporting by firms that receive a subsidy is significantly lower than otherwise by 0.0017035 at 5% significance level given that the absolute Z-value of 7.52 is greater than 1.96 and probability value of 0.000 is less than 0.05. This does not conform to the expected sign. However, the justification for the resultant sign might be due to the misallocation of the subsidy (corruption). The variable location of the firm is of three (3) categories where 1 is located in export processing zones, 2 is located in industrial parks, and 3 is for others (none of the above). The benched category is those located in the export processing zone. All other variables held constant; the odds in favor of exporting by manufacturing firms located in industrial parks is higher than those located in export processing zones by 1.907182 and is statistically insignificant at a 5% significance level given that the absolute Z-value of 1.38 is less than 1.96 and the probability value of 0.166 is greater than 0.05. On the other hand, the odds in favor of exporting by firms located in other areas are less than those in the export processing zone by 0.6132416. They are statistically insignificant at a 5% significance level, given that the absolute Z-value of 1.08 is less than 1.96, and the probability value of 0.281 is greater than 0.05.

All other variables held constant; a unit increase in the educational status of the firm head insignificantly increases the odds in favor of exporting by 1.13335 at a 5% significance level, given that the Z- value of 1.78 is less than 1.96 and the probability value of 0.075 is greater than 0.05. The resultant sign conforms to the expected sign. Education creates the needed manpower with enhanced skills for technological innovation and productivity growth. Firm heads with high levels of education are assumed to be more efficient in working with the resources at hand, leading to more physical output. Therefore, a better-educated firm head is more informed about the benefits of exporting and could drive it for her firm. Nelson and Helps (1966) stated that educated people make promising innovators so that education speeds up the process of technological diffusion. Bartel and Lubtenbery (1987) also stressed the role of education in decoding and understanding information in performing a job effectively.

All other variables held constant; a unit increase in experience of the firm head significantly increases the odds in favor of exporting by 1.035126 at a 5% significance level given that the Z-value of 2.31 is greater than 1.96 and the probability value of 0.021 is less than 0.05. A more experienced firm head sees the need and relevance of exporting and implements it in the firm to oppose less export. Hence, the resultant sign conforms to the expected (a priori) sign.

Tobit Result and Interpretation

Table 5: Tobit Regression Result
The dependent variable is the export

Variable	Coefficient	Standard error	T-value	Probabilityvalue
Total sales	1.367016	0.4422322	3.09	0.002
Labor	-0.0049514	0.0039772	-1.24	0.214
Formal	5.515348	4.553946	1.21	0.226
Age	0.43830385	0.0877332	4.99	0.000
Sex of firm head	-3.979398	3.019555	-1.32	0.188
Export subsidy	-12.21764	2.354558	-5.19	0.000
Location of firm For industrial park	-4.597282	3.186452	-1.44	0.150
For none of	2.570655	3.107943	0.83	0.408
Education of firm head.	-0.511867	0.497643	-1.03	0.304
Experience	0.8676318	0.1084451	8.0	0.000

Source:Researchers'Computed Results Using STATA 13

Table 3 above presents the Tobit regression result. The decision rule here is that if the T-value is greater than 1.96. The probability value is less than 0.05 at a 5% significance level (rule of thumb); the result is statistically significant. However, if otherwise, the result is statistically insignificant. Therefore, total sales, firm age, export subsidy, and experience of firm head increase export earnings in manufacturing firms of Nigeria.

On average, a unit increase in total sales significantly increases export earnings by a predicted value of 1.367016 at a 5% significance level, given that the T-value of 3.09 is greater than 1.96 and the probability value of 0.002 is less than 0.05.

All other variables held constant; on average, a unit increase in labor insignificantly decreases export earnings by a predicted value of 0.0049514 given that the absolute T-value of 1.24 is less than 1.96 and a probability value of 0.214 is greater than 0.05 at 5% significance level. O.

For the variable which is dummy (1 if registered and 0 otherwise), we say that all other variables held constant; on average, export earnings by registered firms is greater than otherwise by a predicted value of 5.515348 but is statistically insignificant at 5% significance level given that the T-value of 1.21 is less than 1.96 and the probability value of 0.226 is greater than 0.05.

Given the value for the variable age as 0.43830385, a unit increase in age an increase in export earnings by a predicted value of 0.43830385 and is statistically significant at a 5% significance level given that the T-value of 4.99 is greater than 1.96 and the probability value of 0.000 is less than 0.05.

For sex, where we have 1 if male and 0 otherwise, all other variables are held constant; on average, export earnings by male-headed firms are less than otherwise by a predicted value of 3.979398. However, this is statistically insignificant at a 5% significance level given that 1.96 is greater than the absolute T-value of 1.32 and the probability value of 0.188 is greater than 0.05.

Given that other variables are held constant, the predicted value of export earnings for firms that received export subsidy is less than otherwise by a predicted value of 12.21764.

However, this is statistically significant at a 5% significance level given that the absolute T-value of 5.19 is greater than 1.96 and the probability value of 0.000 is less than 0.05.

For the variable firm location, we have 3 categories: 1 if located in export processing zones, 2 if located in industrial parks, and 3 if located in other areas. Where located in the export processing zone is the benched category, we have that, on average, export earnings by firms located in industrial parks are insignificantly lower than those located in export processing zones by a predicted value of 4.597282 given that the T-value of /-1.44/ is less than 1.96 and the probability value of 0.150 is greater than 0.05 at 5% significance level.

Also, on average, export earnings by firms located in other areas (neither export processing zones nor industrial parks) are greater than those in export processing zones by a predicted value of 2.570655 but is statistically insignificant at a 5% significance level given that T-value of 0.83 is less than 1.96, and probability value of 0.408 is greater than 0.05.

All other variables held constant; on average, a unit increase in education of the firm head insignificantly decreases export earnings by a predicted value of 0.511867 given that at a 5% significance level, the T-value of /-1.03/ is less than 1.96 and the probability value of 0.304 is greater than 0.05.

On average, given that all other variables are constant, a unit increase in experience of the firm head significantly increases export earnings by a predicted value of 0.8676318 given that the T-value of 8.0 is greater than 1.96 and the probability value of 0.000 is less than 0.05 at 5% significance levels.

Evaluation of Hypotheses
Evaluation of Hypothesis 1
Ho: There exist no significant factors that determine whether manufacturing firms export is significant in Nigeria.

Decision rule: Given that total sales, age of firm, and labor are significant determinants of manufacturing firm export from the analysis carried out, we reject the null hypothesis and accept the alternative hypothesis that there are significant determinants of manufacturing firm export.

Evaluation of Hypothesis 2
Ho: There exists no significant determinant of export earnings in Nigeria

Decision rule: We reject the null hypothesis and accept the alternative hypothesis that there is a significant determinant
of export
earnings given that total sales, age of firm, export subsidy, and experience of firm head are significant
determinants.

CONCLUSION AND RECOMMENDATIONS

This paper seeks to ascertain the determinants of exports in Nigeria, thereby leading to some defined objectives of the study, which are to determine whether manufacturing firms in Nigeria and to ascertain the factors that determine manufacturing export earnings in Nigeria. Following the objectives of this study and the results obtained in the analysis, we conclude that there are significant determinants of export and export earnings in Nigerian manufacturing firms. The most notable among these significant factors are total sales, firm age, export subsidy, and experience of the firm head. In contrast, the insignificant ones are the location of the firm, education of the firm head, and sex of the firm head, among others. The a priori expectation (signs) of a positive relationship between export or export earnings and some variables, such as total sales, labor, formal, and experience of the firm head, were justified. We rejected the null hypothesis of this study and concluded that significant determinants exist for whether manufacturing firms export and manufacturing firms export earnings in Nigeria. The study further recommends that since export is a key driver of economic growth, firms should increase productivity to enable them to export. Again, the government should give more subsidies to manufacturing firms as an incentive to produce more and export their goods.

This study recommends/suggests that since export is a key driver of economic growth, firms should increase productivity (total sales) to enable them to export. The government can get firms with large total sales for any policy on export improvement. The government should give more subsidies to manufacturing firms as an incentive to produce more and export their goods. However, given that export subsidies are significantly negative from the study conducted, the government should see that export subsidies are target-driven to reverse the negative effect on exports, as shown by this result. Finally, firms should choose experienced individuals who know the relevance of export as the firm head, as that will enable the firm to do well in the international market. The choice of firm heads should not depend on sex (gender) or educational qualification but on the individual's experience in the sector.

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SUB THEME
MARKET ACCESS BUILDING A GATEWAY OF OPPORTUNITIES FOR ENDOGENOUS AFRICAN BUSINESS

EFFECT OF ETHICAL RESPONSIBILITY ON NON-FINANCIAL BUSINESS PERFORMANCE OF STARLINE COMPANY COMPANY

Adindu, Chidinma P., Adindu, Michael O. and Nzeoma, Sunny P.
Department Of Marketing, Michael Okpara University of Agriculture Umudike
Department Of Business Administration (Marketing Option), Clifford University, Owerrinta
Department Of Marketing, Imo State Polytechnic, Ehime Mbano Campus, Owerri
Corresponding author: eberechidinma18@gmail.com

ABSTRACT
Ethical responsibility is silently becoming a pivotal phenomenon in Nigeria and other Sub-Saharan African countries, affecting business performance. Despite the growing interest in ethical responsibilities, ethical responsibilities often need to be defined or continually under public debate as to their legitimacy. Thus, they are frequently difficult for businesses to deal with, making it interesting for the study to focus on this. Based on the above, this study on ethical responsibility on the business performance of a manufacturing company has its main objectives as the effect of ethical responsibility on the business performance of the manufacturing company using Starline Company as a case study. It specifically examined the effect of employee empathy on customer satisfaction, analysed the effect of ethical efficacy on customer retention and examined the effect of beneficence on Customer loyalty. The research design took the form of a survey research design. Both primary and secondary information (data) were used. Primary data was collected using a pre-tested and structured questionnaire. The questionnaire items were measured on a five-point Likert Scale. Data collected were analysed using regression analysis. The analysis showed a significant difference between ethical empathy and customer satisfaction; efficacy significantly affects customer retention, and beneficence does not significantly affect customer loyalty. Based on the result, we concluded that ethical business responsibility is an important element driving the Nigerian manufacturing sector's growth, development, and sustainable performance. We recommended that the Nigerian policymakers and the legal and regulatory agencies carefully articulate stiff measures to enhance strong ethical practices in the financial sector, especially the manufacturing sector, to institute much-needed stakeholders' confidence.
Keywords: Ethical Responsibilities, Business Performance, Manufacturing Company

INTRODUCTION
Over the years, the term ethics in organisational performance has long been associated with management scholars and business leaders worldwide (Ezeanyim & Ezeanolue, 2021). There is a broad agreement that, as a matter of corporate policy, every organisation should strive to be committed in an ethically transparent manner (Ezeanyim & Ezeanolue, 2021). Companies strive to ensure sustainability through building strong ethical and long-term shareholder value while being responsible corporate citizens. It is globally believed that the only way to achieve this is to incorporate economic, social and environmental codes of conduct into business strategy (Jayaseelan & Mazumder, 2015). Ethics deals with how decisions affect other people and organisations. According to Etuk (2014), ethics and morality are aspects of axiology concerned with what is good, what is beautiful, and what is desired or preferred human conduct. Ethics concerns contemporary norms or standards of conduct that govern the relationship between human beings and their institution. Ebitu & Beredugo (2015) explain ethics as a set of moral principles or values used by the organisation to steer the conduct of the organisation itself and its employees in all their business activities, both internal and outside the world. Turyakira (2018) argued that ethics in the world of organisation business involve "ordinary decency", which encompasses such areas as integrity, honesty and fairness. Behaving ethically is seen as part of the organisation's social responsibility, which depends on the philosophy that organisations ought to impact society in ways beyond the usual profit maximisation objective.

Ethical responsibilities embody those standards, norms, or expectations that reflect a concern for what consumers, employees, shareholders, and the community regard as fair, just, or in keeping with the respect or protection of stakeholders' moral rights (Enuoh *et al.*, 2020 citing Carroll, 1991). Changing ethics or values precede the establishment of law because they become the driving force behind the very creation of laws or regulations. For example, the environmental, civil rights, and consumer movements reflected basic

alterations in societal values and thus may be seen as ethical bellwether foreshadowing and resulting in the later legislation. Ethical responsibilities also may be seen as embracing newly emerging values and norms society expects businesses to meet, even though such values and norms may reflect a higher performance standard than that currently required by law (Enuoh *et al*., 2020). Ofurum Gabriel (2019) provides that there are basic principles that guide ethical responsibility, especially in the area of business, and they include beneficence, social justice, Non-maleficence, least harm, empathy, efficacy and respect for autonomy

The performance of an organisation is sometimes based on the ethical work climate. Ethical work climate reflects the collective moral reasoning of organisation members. Thus, a strong ethical climate gives employees a foundation for thinking about moral issues (Abiodun & Oyeniyi, 2014). Although organisation members may reason effectively about the right thing to do, translating reason into action depends on the moderating effect of two additional contextual factors: collective moral emotion (collective empathy) and collective ethical efficacy. Furthermore, the moral reasoning reflected in the ethical climate is more likely to translate to ethical behaviour if members care about those impacted by their actions (empathy) and Believe in their ability to successfully follow through in their decision (efficacy) (Branko *et al*., 2015) Thus, ethical climate, collective moral emotion and collective ethical efficacy interact to create an environment more strongly related to ethical behaviour. Business ethics leads to cost and risk reduction. Just as bribery and corruption are seen as detrimental to developing a healthy economy, so is a lack of high ethical standards detrimental to trust and loyalty and their detrimental effects on a company (Ike, 2002). In light of the above, this study focuses on the effect of ethical responsibility on business performance. The specific objectives are to examine the effect of employee empathy on Customer Satisfaction, analyse the effect of ethical efficacy on Customer Retention and examine the effect of beneficence on Customer loyalty.

The study covers the effect of ethical responsibility on the performance of manufacturing companies in southeast Nigeria as the content scope. This study critically examined ethical responsibility and the performance of Starline company variables. Ethical empathy, ethical efficacy, and ethical beneficence are the variable scopes for ethical responsibility, while customer satisfaction, customer retention, and customer loyalty are variables scoped for non-financial performance. The geographic scope for this study is Aba, Abia state, Nigeria. The unit scope was restricted to only consumers of Starline company products.

REVIEW OF LITERATURE

Concept of ethical responsibility

Business ethics is an amalgamation of the principles that guide management's actions concerning their stakeholders (Makinde *et al*., 2021). These stakeholders include the shareholders, employees, creditors, host communities, and society. Shahrul *et al.* (2016) see ethics as a norm that advocates that people be held responsible and accountable for the kind of work they do in the organisation based on the belief that work has inherent value to the individual in a business. According to Ibrahim & Mohammed (2020), organisations that believe in ethics should have a code of ethics that they must follow. Based on this, an organisational code of ethics is simply a statement of corporate principles, ethics, rules of conduct, code of practice or company philosophy regarding the responsibility to employees, organisational members, shareholders, consumers, and other stakeholders.

Furthermore, Agboola *et al.* (2015) describe ethics as part of the focus and responsibilities of a business organisation and therefore, employees are expected to be committed to the core values as well as principles of the organisation. This thus implies that ethics can be broadly seen as the guideline or code of practices that an organisation and its managers can follow to make sound judgements and decisions. This is adjudged so because the organisation's ethics comprises the set rules and standards *-pronounced in law and regulations, as well as internal policy processes and procedures. For instance, honesty and open-mindedness, working with respect, integrity and diligence, and fairness are based on the principles of ethics, which organisational members are expected to imbibe in service delivery to customers and other stakeholders.

Although economic and legal responsibilities embody ethical norms about fairness and justice, ethical responsibilities embrace those activities and practices that are expected or prohibited by societal members even though they are not codified into law (Enuoh *et al.,* 2020). Ethical responsibilities embody those standards, norms, or expectations that reflect a concern for what consumers, employees, shareholders, and the community regard as fair, just, or in keeping with the respect or protection of stakeholders' moral rights (Enuoh *et al*., 2020 citing Carroll, 1991). Changing ethics or values precede the establishment of law because they become the driving force behind the very creation of laws or regulations. For example, the

environmental, civil rights, and consumer movements reflected basic alterations in societal values and thus may be seen as ethical bellwether foreshadowing and resulting in the later legislation. In another sense, ethical responsibilities may be seen as embracing newly emerging values and norms society expects businesses to meet, even though such values and norms may reflect a higher performance standard than that currently required by law (Enuoh *et al*., 2020). In this sense, ethical responsibilities often need to be defined or continually under public debate as to their legitimacy and thus are frequently difficult for businesses to manage.

Chonko (2012) and Ofurum & Gabriel (2019) provide that there are basic principles that guide ethics, especially in the area of business. These principles are known as standards of morals, comprising beneficence, least harm, respect for autonomy, and justice. The first one, beneficence, guides those determined to make the wisest decisions that will be generally agreed upon as ideal. This urgency to do "great" crops from moral decipherability and discernment, leading to a proper answer to a moral or ethical dilemma. It indicates that ethical theories or models should focus on achieving the greatest volume of good for the benefit of the people. Since people are assumed to benefit from the best, it becomes conclusive that this imperative is closely tied to the principles of utilitarian ethical theory (Chonko, 2012).

The second one, the least harmful, focuses on moral situations in which not deciding all seems most advantageous. Subsequently, organisational leaders try their best to ensure that the least damage possible is done and to cause the least damage to the least number of individuals in the organisation (Ofurum & Gabriel, 2019). The third one, respect for autonomy, provides that leaders need to permit individuals to experience freedom and autonomy while trying to make choices that will influence their lives. This implies practising strong-willed power over one's life as much as can be expected since it is believed that an individual has the greatest understanding and, if possible, control of their life. This standard expands the beneficence rule because an individual with autonomy would like to exercise authority over his background (Chonko, 2012).

Finally, justice provides that organisational leaders should always focus their efforts and exertions on reasonable activities for those involved. Ofurum and Gabriel (2019) provide that moral choices need to be predictable and should be derivative from the moral proposition for which there is a validation for the existence of soothing situations.

Concept of Business Performance

A firm's performance is the appraisal of prescribed indicators or standards of effectiveness, efficiency, and environmental accountability, such as productivity, cycle time, regulatory compliance and waste reduction (kamakia, 2014). Performance also refers to the metrics regarding how a certain request is handled or the act of doing something effectively (Ngugi & Karina, 2013). Businesses rely less on financial measures (which are based on Accounting Standards), such as profit, return on investment, and return on assets, to assess overall corporate performance (Wheelen & Hunger, 2002). Measures focusing solely on financial performance are considered less appropriate for current issues that confront organizations (Ahn, 2001; Ambler, 2000; Ittner & Larcker, 1998; Kaplan & Norton, 1996). "Sole reliance on financial performance measures does not arguably reflect the importance of current resource decisions for future financial performance. Though some firms recognized the importance of non-financial performance measures many years ago (e.g., General Electric in the 1950s), growing international competition and the rise of the TQM movement have widened the appeal of non-financial performance measures" (Malina & Selto, 2001). Undoubtedly, the strongest measurement trend in the 1990s was a move by various industries from measuring the narrow success of products to the additional use of complementary non-financial measures oriented around customer value (Clark, 2001). Whence, this work will be limited to non-financial performance

Employee Empathy

Empathy is considered a significant variable for individual consideration among persons (Jones & Shandiz, 2015; Markovic *et al*., 2015). Particularly in the literature concerning service, empathy is an essential element for fruitful employee and customer communications that commonly lead to altruistic motivation and pro-social and altruistic behaviour (Itani & Inyang, 2015). Empathy is "a person's ability to sense another's thoughts, feelings, and experiences, to share other's emotional experience, and to react to the observed experiences of another person" (Wieseke *et al*., 2012). Research confirms that empathy involves cognitive and emotional dimensions (Jones & Shandiz, 2015; Wieseke *et al*., 2012). From a cognitive perspective, empathy is the service employee's potential to take the customer's view through understanding their mind, thoughts, and intentions (Daniels et al., 2014). Regarding the emotional viewpoint, empathy relates to employees' capability to be involved in helpful actions toward customers, such as interpersonal concern and emotional contagion (Mayshak *et al*., 2017). As a form of social or

mutual perspective, empathy relates to the gaining of particular insight into the experience of others while distinguishing it as another person's experience instead of one's own (Itani & Inyang, 2015; Meneses & Larkin, 2012; Ratcliffe, 2012). For better service quality (SQ), employees must recognise and deal with customer needs (Puccinelli *et al.*, 2013). Hence, this study considers employee empathy an independent variable and studies its indirect effect on customer satisfaction and outcomes.

Ethical efficacy

Ethical self-efficacy denotes individuals' confidence in their abilities to behave ethically and achieve ethical outcomes in organisational settings (Huang & Lin, 2019). Ethical perceptions and behaviours from employees help organisations satisfy customers, obtain customers' trust, and thus achieve business prosperity (Dhar, 2016). It is, therefore, vital to cultivate employees' ethical perceptions to prompt ethical behaviours when serving customers. According to social learning theory, observation, imitation, and learning during social interactions are key to shaping individuals' attitudes, perceptions, and behaviours (Yang et al., 2023). Ethical leadership emphasises that leaders act as moral models and encourage employees to learn from them to develop ethical behaviours in the workplace (Bedi *et al.*, 2016).

Moreover, ethical leaders tend to provide training or mentoring to help employees build abilities to address ethical issues (Brown & Trevi˜no, 2006).

Additionally, ethical leaders tend to recognise and reward the ethical behaviours of employees (Brown & Trevi˜no, 2006). In business sectors, employees can perceive that their ethical leaders recognise and reward them by evaluating whether they follow high ethical standards when serving customers (Kia *et al.*, 2019). Hence, employees tend to improve their ethical abilities and conduct more ethically. All these actions of ethical leaders can promote employees' ethical self-efficacy. Employees with confidence in their ethical abilities are inclined to demonstrate these abilities in their day-to-day work, such as prioritising customers' interests, serving customers in appropriate and moral ways, and treating customers honestly (Dhar, 2016), thereby promoting employee service performance in the business context. Furthermore, as individuals tend to maintain and enhance their self-efficacy through increased efforts in enacting relevant conduct (Yang *et al.*, 2021), employees in business sectors are prone to follow high ethical standards when serving customers if they are with ethical self-efficacy. Hence, this study considers ethical self-efficacy an independent variable and studies its indirect effect on customer retention outcomes.

Beneficence

The word beneficence derives from the Latin 'bene facere', meaning 'to do good to'. Beneficence can be described as actions related to mercy, kindness and charity. Research mainly deals with actions that are carried out to benefit others (Shetgovekar, 2018). Beneficence is usually combined with non-maleficence. Beneficence can also be related to other ethical issues. According to Shetgovekar (2018), beneficence and non-maleficence are parallel ethical issues, as stated earlier. Where beneficence discusses the benefit to the participants, non-maleficence deals with avoiding harm to the participants; they are related. However, there can also be issues when a balance needs to be created between beneficence and non-maleficence. However, informed consent is another ethical issue closely related to beneficence. Informed consent can be used to inform the participants about the research objectives and prepare them for the research. Any minimal risk can also be explained to them. Beneficence and justice are also related, as denying justice would hamper beneficence. Ensuring justice or giving the participants what they deserve fairly can be a first step towards beneficence.

Theoretical framework

This study is anchored on the stakeholder theory of organisation management and business ethics propounded by Freeman in 1984. Stakeholder theory is a strategic management paradigm that includes organisational management and ethics (Phillips *et al*., 2003). It deals with values and morals in managing an organisation. Beyond the firm's stockholders, there are several stakeholders. These include its employees, customers, suppliers, distributors, creditors, host communities and the government. The managers are required to protect their interest in the organisation and should not concentrate on pursuing the interest of the shareholders only to the detriment of the other stakeholders; their interests must be pursued single-mindedly. In the postulation of stakeholders theory, Freeman posited that corporations exist for the benefit of every stakeholder. As a result, the managers should refrain from concentrating on pursuing the shareholders' wealth maximisation model. However, they should equally remember the other stakeholders of employees, creditors, the government, suppliers, lenders, the media, the host communities and the general public, who will, in one way or another, be affected in the event of the closure of a corporate organisation. The performance and success of the firm depend on how well it can manage its relationships with these stakeholders (Freeman et al., 2004), and managers of firms can only secure their cooperation towards achieving organisational goals when they successfully develop quality relationships

with these stakeholders. Generating this positive relationship will naturally include social projects and other normally costly actions for the firm, at least in the short run.

Profits are the assured outcome of this association once the value is created (Freeman et al., 2004). This theory maintains that there is a need for an organisation to engage in an active social role in the society where it is operating since it depends on the society for sustenance (Ojo, 2012). This theory is supported by a deontological theory, which Kant developed. The theory argues that the ethical system is better measured by the rules rather than the results. Kant stressed the importance of the basic rules or principles governing decisions (Badi & Badi, 2012). Kant proposed that an act is considered morally right when people act from the standpoint of duty. Stakeholder Theory is useful because it provides a framework for analysing the relationship between stakeholder management and company performance goals.

Review of empirical studies

Ezeanyim & Ezeanolue (2021) worked on business ethics and organisational performance in south-east Nigeria manufacturing firms. The study investigates the effect of ethical climate, unethical standard practices, ethical culture, and ethical behaviour on organisations using selected manufacturing methods in Southeast Nigeria. The study reviewed relevant conceptual, theoretical and empirical literature. The study was anchored on stakeholder theory. A Descriptive research design was adopted. The study was conducted in South Eastern Nigeria, comprising Abia, Anambra, Ebonyi, Enugu, and Imo states. The study population, 4871, comprised all employees of the selected manufacturing firms in the Southeast. A sample size of nine hundred and twenty-seven (936) respondents was selected for the study using the Borg and Gall formula. The questionnaire was employed as the main instrument of data collection.

The study adopts face and content validity. The instrument's reliability was achieved by applying test re-rest and Spearman rank order correlation coefficient. The data generated were analysed using frequency counts and percentages in research questions, while research hypotheses were tested using panel regression analysis. It was found that the ethical climate significantly positively affected the organisation's performance in South-East Nigeria. Unethical standard practices had no significant positive effect on organisational performance. Ethical culture had a significant positive effect on the organisation's performance. Ethical behaviour had a significant positive effect on the organisation's performance in southeast Nigeria. The study concludes that business ethics had a positive significant effect on employee job satisfaction of academic staff of public universities in the Southeast. The study recommends, among others, that decision makers should set the use of ethical conduct as a priority towards improving organisation performance by setting adequate resources and commitment to achieve this end. The manufacturing sector should have a workable system for identifying and resolving ethical problems. Such a system must be open, accessible, independent of the management bureaucracy, and encourage whistle-blowing. Organisations should frequently identify with societal needs by helping to solve these problems as much as possible with utmost sincerity. Managers must ensure that their employees' conduct is under control and that their employees' dispositions regarding their routine duties are monitored ethically.

Enuoh *et al.* (2020) carried out ethical responsibilities regarding the performance of manufacturing firms in Nigeria. This study focused on ethical responsibilities and the performance of manufacturing firms in Nigeria using Lafarge Cement Company as a case study. The major objective of the research was to examine how ethical considerations are adhered to in the operations of manufacturing firms. The research also aimed to ascertain the resultant effect of corporate expenditure in creating a conducive and friendly business environment. The study used an ex-post facto research design to obtain secondary data from the company's financial report. Multiple regression analyses were used to find the relationship between variables and their significance. The findings revealed that waste management cost only significantly affects the company's financial performance. The result of the study showed that CSR affects financial performance when viewed holistically. However, the chosen variables show no significant effect.

Ali *et al.* (2017) worked on the effect of the ethical aspects of the brand on the increase of Corporate reputation among consumers in Shiraz. The research aimed to study constructive factors of ethical brand name and reputation of corporations and the relation between them. The research design used was a descriptive survey research design. The questionnaire was used for data collection, and the Likert scale was used for the quantification of responses. The data collected from a statistical sample of 384 people using questionnaires was analysed. Considering its aim, this research is developmental, but regarding its data collection methods (research proposal), it is a descriptive survey research. As mentioned above, data was collected using questionnaires where the Likert Scale was used to determine the number of response options. Research data was analysed using descriptive and inferential methods. The sample characteristics were descriptively analysed at the descriptive level using statistical measures such as abundance, percentage, average, and standard deviation. In contrast, the correlation coefficients test was used at the

inferential level to provide answers for research hypotheses and to discover some specific relations between the sample variables. The relationship between the two variables of moral brand creation and companies' reputation was identified as positive and strong in this research. Companies must pay much more attention to moralities, moral marketing, and especially moral brand creation and its variables to earn a better reputation. It is suggested that corporations that seek to increase their reputation take activities of ethical branding seriously.

Jayaseelan and Mazumder (2015) worked on the role of business ethics and social responsibility in achieving competitive advantage and ensuring sustainable business (An empirical study on industrial companies in UAE). This study aimed to identify the role of business ethics and social responsibility in achieving competitive advantage through a survey of respondents of managers working in senior management in industrial companies located in the UAE. The sample contained (65) directors working in senior management industrial companies. The study found a statistically significant effect on Business Ethics (independence and objectivity, honesty and integrity, impartiality and transparency) to achieve competitive advantage (lower cost, innovation and renewal) in industrial companies. The study's results also showed a statistically significant effect of social responsibility (responsibility towards the environment, consumers, and the community) to achieve competitive advantage (lower cost, innovation and renewal) in industrial companies. The study recommended the development and promotion of business ethics, the need for the companies to identify ethical policies distributed across the company, and the training of staff to enhance their ability to cope with difficult ethical problems.

METHODOLOGY

This research aimed to show the various effects of independent variables (Ethical empathy, ethical efficacy and ethical beneficence) on the study's dependent variables (Customer satisfaction, customer retention and customer loyalty); hence, the research adopted the cross-sectional survey research design. This research design enabled the researcher to collect unprejudiced data from the study targets and describe the relationship between the variables. Survey research design was chosen because it allows us to describe the characteristics of a large population, which no other research method can provide this broad capability which ensures a more accurate sample to gather targeted results in which to draw conclusions and make important decisions (Kendra, 2020; Ponto, 2015), it also allows us to investigate, describe, and record information in their natural setting. It was also used because we have individuals as a unit of analysis.

The population of this study consists of the customers of Starline products in Aba, Abia state, Nigeria, implying an infinite population. The research sample size was calculated by unlimited population sampling of the Cochrans formula. The appropriate formula for sample number (n) is given better:

$$n = \frac{4pq}{d^2}.$$

where

nr = required sample size

p= Proportion of the calculation having the characteristics

q= 1-p= Proportion of the calculation not having the characteristics

d= The degree of freedom

Using a 95% confidence level and margin error of +or_ 5%

$$n = \frac{4pq}{d^2}$$

$$n = \frac{4 \times 0.5 \times 0.5}{0.0025}$$

$$= \frac{1}{0.0025} = 400$$

The sample size is 400.

Based on the sample size, a convenient sampling technique was used to sample respondents' opinions. The source of data for this work was primary. Hence, a questionnaire schedule was used. The questionnaire was used to generate information. Data was collected through self-administered copies of structured questionnaires. The questionnaire was divided into two (2) questions relating to dimensions of ethical responsibility (ethical empathy, ethical efficacy and ethical beneficence) and non-financial performance (Customer satisfaction, customer retention and customer loyalty). The questionnaire was structured based on a five-point Likert scale ranging in order from 1 – Neutral; 2 – Small Extent; 3 – Medium Extent; 4 – Large Extent; and 5 – Very Large Extent.

Reliability

The test –Retest method using the Cronbach Alpha coefficient was used to find out the instrument's reliability. This study analyses the Cronbach's α value by the reliability analysis of SPSS and gets the reliability analysis result that is shown in Table 1 below:

Table 1: The reliability test of the instrument

Items	Number of Items	Reliability coefficient
Ethical Empathy	5	0.8815
Ethical Efficacy	5	0.8913
Ethical Beneficence	5	0.8792
Customer Satisfaction	5	0.8298
Customer Retention	5	0.7293
Customer Loyalty	5	0.7591

Source: Field Survey 2023.

The table shows that all the Cronbach's α values are more than 0.7 and indicates that all the measure items are reliable according to Nunnally (1978). These instruments had achieved acceptable reliability for business and social science research.

Decision rule

For this research work, the Apha level was 0.05. Therefore, the decision rule was to accept the null hypothesis if the P-value is greater than 0.05, but where the P-value is less than 0.05, we reject the null hypothesis and accept the alternate hypothesis.

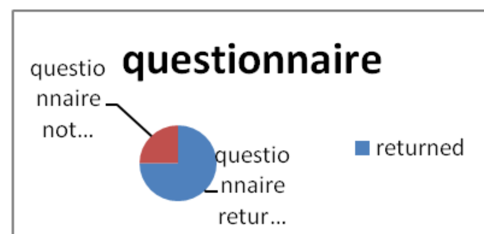
Analytically, the study adopted simple regression analysis to analyzed data collected.

RESULTS AND DISCUSSION

In order to analyse the data collected in this research, descriptive statistical features such as frequency, percentage, mean, standard deviation, and simple regression analysis were used. Frequency and percentage were used to analyse the characteristics of the population, and the mean and standard deviation were used to show the response rate of each variable. Inferential analysis was used to respond to research hypotheses and find effects between population variables.

Descriptive statistics of Response Rate

The data collection instruments and questionnaires were distributed to respondents; however, out of 400 questionnaires, 327 were returned and filled in, making a response rate of 80%. This response rate is acceptable and representative and conforms to Mugenda and Mugenda's (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good, and a response rate of 70% and over is excellent. The results are shown in Figure 1



Source: Research Data (2023)

Figure 1: Showing the Questionnaire Response Rate

The descriptive statistics showing the demographic of the respondents are given in Table 2 below:

Table 2: Descriptive statistical showing the demographic of the respondents

Age	Frequency	Percentage
20-30 years	17	5.2
31-40 years	99	30.3
41-50 years	184	56.3
51 years and above	27	8.2
Total	**327**	**100**
Educational Qualification		

Sex

Sex	Frequency	Percentage
Male	126	38.5
Female	201	61.5
Total	**327**	**100**

Qualification	Frequency	Percentage
No Formal Education	1	0.3
Secondary	30	9.2
Undergraduate	80	24.5
Graduate	186	56.8
Postgraduate	30	9.2
Total	**327**	**100%**

From Table 2 above, it was indicated that 56.3% of the respondents were between the age range of 41-50 years, 30.3% were between 31-40 years, 8.2% were 51 years and above, and 5.2% were between 20-30 years. The results in Table 2 also indicated that 61.5% of the respondents were female, while 38.5% were male. The findings indicated that most respondents were female, and the difference is significant. The education levels of the respondents are categorised into 5 groups: no formal education, secondary, undergraduate, graduate and Postgraduate. From the table, 56.8% of the respondents of this research are graduates, 24.5% are undergraduate, 9.2% are postgraduate and secondary, respectively, and 0.3% have no formal education.

Analysis of regression results

Three hypotheses were projected for this study and were tested as follows:

Test of hypothesis i

Test i is based on hypothesis 1 projected in null form thus:

Ho_1: There is no significant difference between ethical empathy and customer satisfaction

This test was executed using the regression analysis, and it is shown in Table 3 below:

Table 3: Regression analysis on the effect of ethical empathy on consumer **satisfaction**

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.887	.998		9.907	.000
Ethical empathy	.383	.040	.567	9.675	.000

Source: Research Data (2023).

The following equation represents the regression of the effect of Ethical empathy on consumer **satisfaction**.

CS = 9.887 + 0.383 EE

Consumer **satisfaction** (CS) = $\beta 0 + \beta 1$

Where

$\beta 0$ = Constant

$\beta 1$ = Coefficient of the independent variable

EE= Ethical empathy

Ethical empathy was taken in this study as the independent variable used to test the effect of ethical empathy on consumer **satisfaction**. Table 3 shows that when ethical empathy increases by one unit, consumer **satisfaction** increases by 38.3%. It can be seen from the result that ethical empathy has a significant effect on consumer **satisfaction**, as the significance level of the test is less than 0.05. Regression analysis led us to reject the hypothesis null hypothesis that ethical empathy does not affect consumer **satisfaction**. The result reveals that consumer **satisfaction** is affected by a company's ethical empathy.

Test of hypothesis ii

Test it is based on hypothesis 2 projected in null form thus:

Ho_2: There is no significant difference between ethical efficacy and customer retention.

This test was executed using regression analysis by E-views, and it is shown in Table 4 below:

Table 4: Regression analysis on the effect of efficacy on customer retention

Dependent Variable: Customer retention

Independent Variable: Efficacy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EF	0.425328	0.117039	6.667216	0.0080
C	5.021504	0.454544	2.247317	0.0268

R-squared	0.120187	Mean dependent var	4.125250
Adjusted R-squared	0.108907	S.D. dependent var	0.576423
S.E. of regression	0.544130	Akaike info criterion	1.645425
Sum squared resid	23.09404	Schwarz criterion	1.704976
Log-likelihood	-63.81700	Hannan-Quinn criteria.	1.669301
F-statistic	10.65517	Durbin-Watson stat	1.942897
Prob(F-statistic)	0.001631		

Source: Research Data (2023): the result of regression analysis using E-views.
Table 4 Result of OLS-based regression of the effect of efficacy on customer retention

The following equation represents the regression of the effect of efficacy on customer retention.
CR = 5.021 + 0.425 EF
Customer retention (CR) = $\beta 0 + \beta 1$
Where
$\beta 0$ = Constant
$\beta 1$ = Coefficient of the independent variable
EF=Efficacy
Efficacy is taken in this study as the independent variable used to test the effect of efficacy on customer retention. The partial slope coefficient of 0.425 measures the elasticity of customer retention concerning the efficacy. Based on the result in Table 1 (4), efficacy has a coefficient of 0.425, which suggests that efficacy positively affects customer retention. This implies that a unit change in customer retention results from 0.425 changes in efficacy, will lead to a 0.425 increase in customer retention.
It can be seen from the result in Table 4 that efficacy has a significant effect on customer retention as the significance level of the test is 0.0080, which is less than 0.05. Regression analysis led us to reject the null hypothesis that efficacy has no effect on customer retention, and we concluded that efficacy significantly affects customer retention.
Test of hypothesis iii
Test iii is based on hypothesis 3 projected in null form thus:
Ho_3: There is no significant difference between beneficence and customer loyalty.
This test was executed using regression analysis by E-views, and it is shown in Table 5 below:

Table 5: Regression analysis on the effect of beneficence on customer loyalty.
Dependent Variable: Customer loyalty
Independent Variable: Beneficence

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Beneficence	0.396609	0.095689	2.519713	0.3670
C	3.130391	0.364265	8.593724	0.0000

R-squared	0.059699	Mean dependent var	4.041405
Adjusted R-squared	0.050296	S.D. dependent var	0.459637
S.E. of regression	0.447929	Akaike info criterion	1.251048
Sum squared resid	20.06401	Schwarz criterion	1.302518
Log-likelihood	-61.80344	Hannan-Quinn criteria.	1.271890
F-statistic	6.348952	Durbin-Watson stat	1.743809
Prob(F-statistic)	0.013328		

Source: Research Data (2023): the result of regression analysis using E-views.

Table 5 Result of OLS-based regression of the effect of Beneficence on Customer loyalty
The following equation represents the regression of the effect of beneficence on Customer loyalty.
CL = 3.130 + 0.396 B
Customer loyalty (CL) = $\beta0 + \beta1$
Where
$\beta0$ = Constant
$\beta1$ = Coefficient of the independent variable
B=Beneficence
Beneficence is taken in this study as the independent variable used to test the effect of beneficence on customer loyalty. The partial slope coefficient of 0.396 measures the elasticity of customer loyalty concerning beneficence. Based on the result in Table 5, beneficence has a coefficient of 0.396 with a prob of 0.3670, higher than 0.05. Therefore, we accept the null hypothesis and reject the alternate. We concluded that beneficence does not have any significant effect on customer loyalty.

Discussion of findings

This study's general objective is to examine the effect of ethical responsibility on business performance in the state of Abia. It examined how ethical responsibility (proxied by employee empathy, efficacy and beneficence) affects the business performance (proxied by customer satisfaction, retention and customer loyalty) of the first bank in Abia state. The first objective was to examine the effect of employee empathy on customer satisfaction. The result revealed that employee empathy has a significant effect on customer satisfaction. Employee empathy can play an essential role in developing customer satisfaction during service interactions within manufacturing services. Hence, the display of empathic behaviour by service employees during interpersonal interactions between customers and service employees positively affects satisfaction (Jones & Shandiz, 2015). The result of this study was found to be inconsistent with the studies of Bahadur *et al.*, 2017; Jones & Shandiz, 2015; Khan *et al.*, 2015 Markovic *et al.*, 2015. Our overall sample results confirm the proposed hypotheses, and it can be concluded that employee empathy is central for those service industries that want to leverage their investments in customer satisfaction outcomes (Aksoy, 2013)

The second objective was to examine the effect of efficacy on customer retention. The result revealed that efficacy has a significant effect on customer retention. This implies that employees believe in following through on their ethical decisions successfully. It also implies that the ethical efficacy behaviour of the employees interacts to create an environment more strongly related to ethical behaviour to consumers, thereby leading to the retention of customers. Besides, with such a large customer base and competitive market, it has become imperative for service brands to focus on ethical efficacy for the acquisition and retention of customers. Moreover, a highly ethical operation is likely to spend less on protecting itself against fraud, which can motivate workers and attract and reduce risks associated with business (Ike, 2002).

The third objective was to examine the effect of beneficence on customer loyalty. The result revealed that beneficence has no significant effect on customer loyalty. This implies that charity, mercy, and kindness towards the customers do not make them loyal. However, Erben and Guneser (2007) found that leadership demonstrating individualised care, understanding, and forgiveness elicited strong affective commitment. How people perceive the way they are treated can result in "greater trust and commitment, improved job performance, more helpful citizenship behaviours, improved customer satisfaction/ loyalty and diminished conflict (Cropanzano *et al.*, 2007), which are critical factors as companies pursue strategic competitive advantage (Cameron, 2003). This result is inconsistent with the studies of Erben and Guneser (2007) and Cropanzano *et al.*, 2007).

Moreover, an integral part of work as a professional is the foundational ethic of beneficence. Furthermore, beneficent acts can be performed from a position of obligation in what is owed and from a supererogatory perspective, meaning more than what is owed. An example of this is what has become known as a random act of kindness. This result was inconsistent with the studies of Erben & Guneser (2007) and Cropanzano *et al.*, 2007).

CONCLUSION AND RECOMMENDATIONS

The performance of organisations has received research attention from researchers, managers and other stakeholders in the manufacturing sector around the world. The rate of importance attributed to organisations' performance is often exhibited in the extent to which firms have gone to seek strategies to develop and improve their performance levels. Some approaches organisations have espoused include improving strategic processes, enhancing employee incentives and ensuring an ethical climate. This paper,

therefore, focuses on the extent to which business ethical responsibility affects the performance of organisations, especially the manufacturing sector.

The cross-sectional data collection method was used to collect primary data with a well-structured questionnaire. The data were analysed using simple linear regression. Several important findings have been revealed in the study. It was revealed that other dimensions, such as empathy and efficacy, have significant effects, while beneficence has no significant effect on its independent variable. Therefore, based on the study's results, ethical business responsibility is an important element that will drive the Nigerian manufacturing sector's growth, development, and sustainable performance. The study further ascertained that sound ethical practices must be maintained by all the stakeholders in carrying on their day-to-day activities for sustainable performance.

This study recommends that Nigerian policymakers and the legal and regulatory agencies carefully articulate stiff measures to enhance strong ethical practices in the financial sector, especially the manufacturing sector, to institute much-needed stakeholders' confidence. Strong and effective policy regulation will bring about significant compliance and improve business operations being operated in line with laid down rules and adequate information disclosure.

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BLUE OCEAN STRATEGY AND MARKET SHARE CONCERN OF SELECTED SMALL AND MEDIUM SCALE ENTERPRISES (SMEs) IN IMO AND ABIA STATES, NIGERIA

Boniface, Moses O. and Uwasomba, Chidiebere E.
Michael Okpara University of Agriculture, Umudike, Nigeria
Corresponding author: bonifaceosumba@gmail.com

ABSTRACT
The research was on how business fingernails survive among global sharks through the blue ocean strategy. This is a market share growth concern of selected small and medium-scale enterprises (SMEs) in Imo and Abia States, Nigeria. The study adopted a causal survey research design where the respondents' opinions were elicited through a well-structured 4-point Likert-scale questionnaire. A sample size of 250 was computed from the study population of 661 using Taro Yamen's Method. The Cronbach Alpha results of the test-retest values of 0.74 and 0.76, which were above 0.70 in reliability, were used. Multiple regression models were used for data analysis. The study established that value innovation, product differentiation, and penetration pricing strategies as dimensions of blue ocean strategy positively affected the market share growth of the selected SMEs in the study area. This implies that improvement in product and service quality, packaging, the business premises interior designs, and pricing have differential effects on achieving and sustaining market shares of SMEs in Imo and Abia States, Nigeria. The study recommends that these SMEs effectively manage their use of value innovation strategy by making provisions for improvement on product attributes such as package, shape, size, and color, among others, which will enable them to adopt value differentiation and penetration pricing strategies in achieving market their market share growth in the long run.
Keywords: Blue Ocean, Product Differentiation, Penetration Pricing and Value Innovation

INTRODUCTION

Blue Ocean Strategy (BOS) is a concept that enables organizations to think and create innovation in their business that can assist them in competing in the less competitive market to generate sustainable market share growth and profit. The BOS offers user firms a framework for creating an uncontested marketplace. Moreover, this changed the concentration of the firm's strategy from the current competition to the creation of innovative value and demand. In contrast, the traditional Red Ocean Strategy was accustomed to being involved in competition. Following this concept by Small and medium-scale enterprises (SMEs) in Southeast Nigeria to pursue their marketing strategy for their business success (especially in terms of market share growth) is the concern of this study.

In light of business developments marked by rapid and dynamic transformations and complexity in different sectors of the Nigerian economy, SMEs need help to survive amidst relatively large and global firms. This is similar to the global business conditions in today's world and the ever-changing environmental variables, making it even more difficult to use marketing research and intelligence networks to design marketing strategies and take action on future long-term plans. It requires *strategic thinking* to devise marketing means for the growth and survival of SMEs in Nigeria's Red Ocean Market, characterized by 'ultra-competitive dynamics.'

Strategic thinking, therefore, has focused mainly on competitive approaches in the 'fragmented industries' where these SMEs operate. Moreover, competition issues have been at the core of the policy growth trends of SMEs in Nigeria. No wonder these SMEs need to learn 'market swap' by competing in markets with less competition and adopting strategic measures to attract fewer rivals from relatively large and multinational firms. Strategies such as value innovation, differentiation, cost reduction, penetration pricing, or focus, through an analysis of the values of the economy, become the best option (Eskandari *et al.*, 2015). All these borders on how offering superior value can create avenues for value innovation and market share growth for SMEs in their markets or industries. This has created global marketing revolutions as SMEs (the business Fingernails) strategize to compete, grow, and survive among Multinational firms (The Global Sharks). Thus, it led to the birth of Blue Ocean against Red Ocean Strategies.

One of the most significant innovations in strategic management, which has contributed to a revolution in this sector, is the BOS, which has adopted measures to provide a range of particular instruments and methods to achieve the organization's strategic objectives. The BOS is the question of beating

competition by finding new marketplaces and 'spaces' for companies. In the past, however, finding small markets in traditional economies was like this concept of BOS, where market share competition was restricted. In BOS, you do not have to restrict your target industry and clients to the traditional approach. However, you also focus on creating valuably innovative technologies and entering fresh regions, businesses, and markets (Tavallaee, 2010).

Any SME that adopts BOS should follow the six traditional values that any company that operates Blue Ocean should formulate and execute. They are: 1. Reconstruct the limits of the industry, 2. Focus on things other than numbers in the big picture; 3. Reach beyond current demand 4. Right the strategic sequence, while two are principles of execution. 5. Overcome main hurdles in the organization, 6. Build a strategy for execution. Organizations compete and leave behind their rivals to increase market demand (Kim & Mauborgne, 2005). The essence is that 'Red Oceaners' will always exist. Moreover, their strategic moves must matter, but Blue Oceans must be created for high performance. The blue ocean is where SMEs operate to survive amid large and multinational firms, especially now that the Nigerian economy is suffering from inflation (Kim & Mauborgne, 2005; Hollensen, 2013).

Some of the scholars who have contributed to BOS are Kim and Mauborgne. They have offered the BOS focusing on competition avoidance and developing valuable innovations that lead to lower costs and increased customer value (Chang, 2010). With the endless endeavors of Kim and Mauborgne, BOS, as a new strategy for achieving success through analyzing the market to achieve goals, got wide acceptance by many organizations. However, there is no available evidence of an attempt to study the impact of this BOS on organizational goal achievement. There is an absolute need to conduct a study justifying the BOS impact on organizational goal achievement, which will further assist business decision-makers in deciding whether to go for BOS for their organization. In this study, this field tried to cover and again analyze the suitability and applicability of BOS in small and medium-sized enterprises (SMEs) in southeast Nigeria.

SMEs in developing countries such as Nigeria struggle to survive under intense competitive environments. Oyebamiji *et al.* (2013) discovered that Small and Medium Enterprises (SMEs) in Nigeria have not performed creditably well and, hence, have yet to play the expected vital and vibrant role, thereby raising serious concerns among policymakers. There is a convergence of challenges confronting SMEs, including marketing-related issues. From the marketing perspective, a perceived ineffective marketing strategy severely affects SMEs' performance, product quality, customer satisfaction, and profitability. Small and medium enterprises (SMEs) operators must provide a quality product with good packaging that satisfies customer needs, offer affordable prices, engage in wider distribution, and back it up with an effective promotion strategy to survive the pressure from the competitive global market environment.

Much research has been done on the effect of the Blue Ocean Strategy on the marketing performance of bigger firms. Many recent surveys on empirical research, assessment instruments, and other elements of Blue Ocean policies (Borgianni *et al.* (2012) have been conducted that indicate the significance of this approach. It is possible to summarize five fundamental components or dimensions of the BOS as stated (Omar & Tasmin, 2015) and modified from (Kim & Mauborgne, 2005a) as follows: 1. Creating unchallenged market space 2. Making it irrelevant to competition 3. Creation and capture of new demand 4. Breaking the trade-offs of value-cost. 5. Achieving differentiation and low cost. The BOS helps satisfy existing customers and reach previous non-customers (Uzoamaka et al., 2018). Kim and Mauborgne (2005b) show that the BOS is helping organizations to innovate and create new products, thus gaining greater market share.

Noticeably, few studies are related to BOS as a marketing strategy for generating or developing new markets and market space for SMEs. Few studies were performed to examine BOS's influence on organizational performance. Per the above few empirical reviews, the study's objective was to fill the identified gap by examining the effect of BOS on market share of the selected SMEs by examining relationships existing between value innovation strategy on market share, penetration pricing strategy on market share and differentiation strategy on market share of the selected SMEs in the study area.

Our findings present severe implications and will benefit customers, the enterprise, policymakers, students, and researchers. Customers will benefit from the research because it will help them easily identify products that give better satisfaction among the plethora of substitutes. The enterprise will see the material as a source of knowledge in designing and distributing their products. This is because it will help them to choose better containers to package their products. The researcher will see the study as a source of material, especially for literature and empirical framework. Students and lecturers will use the materials to complement their classroom knowledge.

REVIEW OF LITERATURE

Blue Ocean Strategy

BOS, or value innovation management, is the strategy that reframes the strategic challenge from involvement in competition to make competition irrelevant and provides a series of approaches that maximize opportunity and minimize risk (Leavy, 2005). "When we ask scholars to define what BOS is and what drives its success, we typically get one of three answers. Some see it as fundamentally about reconstructing market boundaries and offering buyers a leap in value. Others see the essence of BOS as unlocking business model innovation through strategic pricing, target costing, and the like so a company can seize new customers profitably. Still, others see it as fundamentally about releasing people's creativity, knowledge sharing, and voluntary cooperation through the proper approach to employees and partners. All three are correct answers" (Kim & Mauborgne, 2015). Low & Ang (2012) said, "BOS is about growing demand and breaking away from the competition and having an open mind in business, and seeking all opportunities of creating uncontested market space, and in this way, it makes the competition irrelevant." Mi (2015) defined BOS as "BOS provides a theoretical framework and a practical roadmap for companies to break away from the cutthroat competition in existing industries and create new market space of profitable growth." They advocated that market boundaries break down the trade-off between value and cost through cognitive reconstruction of market elements, under which view it argues that by strategic actions of micro-level actors, industry structure can be changed, which requires alignment of value, profit, and people propositions of strategy in support of pursuing differentiation and low cost.

The contemporary ideas of organizations' strategic dimensions, market networking, and service fields are similar to two 'market continents': the Blue Oceans and the Red Oceans. Indeed, in the Red Oceans continents, firms that operate there are renowned for participating in all sectors and facilities in which they compete. This is where the global sharks, like the multinational firms in today's organizations, operate. On the other hand, the Blue Ocean is an unknown space for the big sharks. Rather, SMEs with different market targets and company sectors are symbolic of those firms that operate in markets that global firms see as small and non-existent market spaces or areas. This traditional approach notwithstanding, nowadays, an approach that will guide the organization to the Blue Ocean is not traditional approaches, such as item growth and facilities (including metropolitan growth, policing facilities), discrete variations, working and service growth scopes, work and facilities intrusions, involvement, price decrease, and transfer. It represents a valuable innovation that will generate more value for stakeholders by reducing expenses by implementing it (Eskandari *et al.*, 2015). Rather, the adoption to create a fresh industry in which there is no competitor and make rivalry pointless; this is exactly what BOS means (Buisson & Silberzahn, 2010).

From our analysis, therefore, blue ocean markets are those sectors or markets that still need to be established, those that are not presently exiting. Blue Ocean is a place in which there is no competitor (a new market). Therefore, this environment has a high potential to generate lucrative and profitable returns for those companies that create it. We should also consider that this market has no 'severe' competitive environment (Burke *et al.*, 2009). Brady (2005) states that the BOS is developed based on quality developments. These are measures that slow down expenses while speeding up the importance for consumers at the same time. As the scale of business increases, the company can decrease expenses. Other features of the BOS are creating uncontested market space, rendering the competition irrelevant, creating and capturing new demand, and breaking the value-cost trade-offs. Overall, the organization's use of the BOS to enforce success has experienced flow in recent years due in part to daily disruptive technologies.

Kim and Mauborgne (2004b) suggest that value innovation is the foundation on which Blue Ocean is built to bring satisfaction to customers. By value innovation, Blue Ocean builds the unquestioned market space. Value Innovation is not about fighting for market share with other organizations but discovering new markets and innovating values for clients and the organization itself (Kim & Mauborgne, 2005; Randall, 2015). Kim and Mauborgne (2005b) stated that eliminating, reducing, creating, and raising dimensions of the market offering are four measures to create value innovation for clients and organizations. Comparatively, the rivalry is concentrated in the current red ocean strategy (ROS) industry (Borgianni *et al.*, 2012; Leavy, 2005).

Differences between Red Ocean and Blue Ocean Strategy

From our discussion, there are primarily two approaches to competing in the market: Red Ocean (structuralist) and Blue Ocean (reconstructionist). These show the difference between economic attractiveness, the capacities of the organizations, and whether it has a strategic direction for competition or innovation–that must be suited. The structural approach calls for a low-cost or differentiated approach to individuals, importance, and profit when Reconstructionists address both (Kim & Mauborgne, 2005). It

is further supposed that the Red Ocean is the traditionally overcrowded renowned marketplace where business is at a particular boundary, and there is a strategic match scheme for firms that compete to outperform market demand competitors that restrict elevated output and make a red ocean growing competition. Moreover, in contrast, the Blue Ocean is an unexplored market arena in which there is an undisputed market space without rivaling or making the competition irrelevant, and without the traditional industry borders creating a new industry in the existing non-red ocean industries that is a notion that it is in deep waters.

The BOS provides a range of possibilities for profitable, fast business development. Whether businesses know the reality, since previous days, BOS has always had a huge implementation in the company. Both approaches have coexisted and will continue to exist (Kim & Mauborgne, 2005). The BOS is the strategy for creating value and exploring non-clients, generating a canvas of a company system with a full picture of reliable variables for alignment. In addition to developing an empathy map, the non-customers of this fresh industry can be separated into a business model canvas to obtain a more thorough understanding (Berry, 2015). Concurrently, it pursues differentiation and low prices and stresses development for new and fresh entrants. It decreases expenses while simultaneously increasing the importance of customers. It is visually created to efficiently execute businesses' collective wisdom (Hollensen, 2013).

BOS features consist of the traditional way to achieve organizational efficiency using strong current rivalry, defeating competitors, taking advantage of current requirements, trade value or price, and harmonizing the company's operation with its strategic low-cost and differentiated selection (Kim, 2010). However, while BOS has a powerful emphasis on organization, divisions, imperative tag-line, the creation of an undisputed marketplace, the irrelevance of rivalry, the creation of fresh demands and seizing of fresh supply, the breakdown of value or the trade in costs, and the harmonization of the whole scheme of organization's functions (Kim & Mauborgne, 2005).

Value Innovation

Innovation is the pioneer driver for long-term business growth, which is widely recognized (Buisson & Silberzahn, 2010). Kim & Mauborgne (1997) investigated some high-growth companies and their low-growth competitors. They found that the low-growth companies followed the strategy in a traditional way of achieving the competitive advantage that most companies do; on the other hand, the high-growth companies regarded completion as irrelevant through strategic logic, which the author named value innovation. In their study, Kim and Mouborgne (2000) said, "Market-shaping innovations win by creating new customer pools, not by increasing the share of an existing customer pool."

Cost Leadership Strategy

Porter's cost leadership strategy focuses on gaining a competitive advantage by having the lowest cost in the industry (Ofunde, 2015; Robert & Gathinji, 2014). In order to achieve a low-cost strategy, a Small and Medium Enterprise must have a low-cost leadership strategy designed to achieve low-cost manufacturing and a workforce committed to the low-cost strategy (Gathinji, 2014). The enterprise must be willing to discontinue any activities in which they do not have a cost advantage and should consider outsourcing and other related activities to other organizations with a cost advantage (Malburg, 2010). To have the capacity to create and capture value, given the Potential Industry Earnings (PIEs), an effective cost leadership strategy should be designed to capture a large market share.

Going by the view of Porter (1985; 2012), only one firm is supposed to be a cost leader in a particular industry. Moreover, As a result, the firm must raise high entry barriers against other competitors in that industry to achieve a sustainable competitive advantage given her cost-leadership strategy. This high entry barrier, especially against potential entrants, will make it difficult for these other enterprises to have huge capital requirements to invest in the industry and capture market share (Hyat, 2011). The cost leader is then insulated against price wars, which may result from industry-wide price reductions that can be worsened by "Price triggers" in the industry (Tresch, 2011). Cost leadership strategy creates customer loyalty and can be achieved if the enterprise adopts outsourcing, especially in those areas of the enterprise value chain where the SME does not have a cost advantage (Shepherd *et al.*, 2014).

Penetration Pricing Strategy

Pricing strategy refers to an enterprise's coherent action plan to set its product's price in the target market (Sije & Oloko, 2013). Most successful pricing strategies give an enterprise some unique property or a distinctive means for renewing its competitive advantage as the business environment changes (Haberberg & Rieple, 2008). Penetration pricing is one of the most effective marketing strategies for a cost-leadership business enterprise (Sije & Oloko, 2013). This strategy involves setting a low entry price for a new product or brand to gain a breakthrough in a highly competitive market. The strategy can also be used when introducing a novel product or tapping a new market segment for an existing product (Vikas, 2011).

A cost-leadership firm employs penetration pricing with the expectation that, eventually, the price will be raised once the initial marketing objectives are fulfilled. Its main aim is to attract the customer and brand loyalty and long-term profit maximization from market share growth (Vikas, 2011). Penetration pricing helps cost-leadership firms speed up the adoption of their companies and products and proves successful as these firms will experience a cost advantage (Gottfried & Hans, 2008). It is noteworthy that cost leadership strategies pay attention to differentiation and focus strategies. Furthermore, they are also applied to augment the major focus, cost leadership (Gottfried & Hans, 2008).

Differentiation Strategy

In adopting a differentiation strategy for competitive advantage, an enterprise focuses on providing a unique product or service (Bauer & Colgan, 2010). Since the product or service is unique, the strategy provides high customer and brand loyalty (Robert & Gathinji, 2014). Differentiation strategy can be divided into market and product differentiation (Rober & Gathinji, 2014). Market differentiation refers to market segmentation, which involves the dividing of the total heterogeneous market into distinct and homogenous markets to develop a specific marketing program to satisfy each of these segments at least cost to the customer and at a profit to the enterprise (Kotler & Amstrong, 2012; Inyanga, 2014).

Product differentiation involves the use of specific product attributes like package, style, features, and designs, to make the product of the enterprise different from that of the competitor to attract preference in a specific dimension, like customer loyalty, in a target market (Kotler & Armstrong, 2012). Product differentiation fulfils a customer's need and involves tailoring the product or service to the customer in a particular target market (segment). This allows the enterprise to charge premium prices to capture market share (Robert & Gathinji, 2014). The differentiation strategy is effectively implemented when the enterprise provides unique or superior value to the customer and positions itself through product quality, features, and after sales supports, all geared to gain market advantage (Robert & Gathinji, 2014).

Firms following a differentiation strategy can charge a higher price for their products based on product innovation and characterization, the delivery system, the service quality, or the distribution channels (Asara & Gathiniji, 2014). Thus, a differentiation strategy appeals to a sophisticated or knowledgeable customer interested in a unique or quality product and willing to pay a higher price. The key step in devising a differentiation strategy is determining what differentiates a company from competitors in an industry or market (Reilly, 2012). It is this uniqueness that determines the value added. The value added by the uniqueness of the product may allow the firm to charge a higher premium price for it. Because of the product attributes, suppliers increase their prices, and the firm may be able to pass along the costs to its customers who need help finding substitute products (Johnson & Scholes, 2009).

Enterprises that often have some internal strengths will succeed in differentiation strategy to achieve marketing performance and gain sustainable competitive advantage as internal strengths are access to leading scientific research and development skills, a highly skilled and creative development team, a strong sales team with the ability to successfully communicate the perceived strengths for quality and innovation (Robert & Gathinji, 2014).

Market Share

Market Share represents the percentage of the market a particular enterprise has captured about the total market for a particular product (goods or service). It is also the number of customers that the enterprise can control (service) given the total demand in the market or the industry for the product (Tresh, 2011). This can be computed by taking the sales of the enterprise over the period and dividing it by the industry's total sales (market).

Market share is a function of approximation and relative industry definition (Tresh, 2014; Shepherd et al., 2014). Through market share, we can determine the degree of competition in an industry. Thus, an industry where no firm has a large market share is typically more competitive than one firm or a few have a large market share. Furthermore, one of the ways to assess competitiveness in an industry, especially the ones occupied by large firms, is the "Concentration Ratio" (Shepherd *et al.*, 2014).

Another is the Hirschman-Herfindahl Index (HHI), which sums the squared market share of each firm in the industry (Shepherd, 2014). It has been perceived that an industry with three (3) firms with shares of 10%, 60%, and 30% would have an

$$HHI = (\frac{1}{10})^2 + (\frac{6}{10})^2 + (\frac{3}{10})^2 = 0.67832.$$

Typically, the HHI is multiplied by 10,000 when reported. So, the HHI for this hypothetical industry would be 6.782. An industry with a single firm would have an HHI of 10,000, while an industry with 100 equal-sized firms would have an HH of 100 (Sharpened *et al.*, 2014).

However, another dimension for determining market share is the market position of the firms participating in the industry, where we have market leaders, market challengers, market followers, and market niches (Best, 2014). By this analysis, market leaders occupy about 40% (0.4) of the market share; market challengers occupy 30%(0.3%), while the market followers occupy 20% (0.2). Furthermore, 10% (0.1) of the remaining market share is occupied by market niches.

Market Share Growth Strategies

Market share growth strategies are those plans adopted by some enterprises to increase their market share (number of customers) in the industry or total market (Afande, 22015). The strategies usually adopted for this purpose are suggested by Igor Ansoff (1957). The Ansoff Product/Market Growth Matrix (as it is usually called) is a marketing tool that allows enterprises to consider ways (strategies) to grow their businesses via existing and, or new products in existing and or new markets (Afande, 2015). There are four possible product-market combinations, and this matrix helps companies decide what course of action should be taken, given current performance and the expected competitive advantage. This matrix consists of four strategies, as represented herein.

Market Penetration	Market Development
Product Development	Diversification Development

Figure 1: Ansoff Market-Product Matrix
Source: Ansoff (1957 in Afende, 2015).

Market Penetration: This strategy focuses on existing markets and existing products. Market penetration occurs when an enterprise enters or penetrates a market with current products. The best way to achieve this is by gaining competitor's customers (part of their market share). Other ways include attracting non-users of products or convincing current users to use more of the company product/service. This can be achieved with advertising and other promotional tools. Market penetration is the least risky way for market share growth for small and medium-sized enterprises to achieve marketing performance and gain sustainable competitive advantage (Afande, 2015).

Market Development: This involves existing products in a new market. An enterprise that adopts this strategy uses an established product for new markets (customers) with the aim of increasing sales and profit, which will cause an increase in market share. The market may not be entirely new in the industry, but the point is that it is new to the enterprise.

Product Development: This is when an enterprise with a market for its current products will develop new products for the same market, targeting the customers. The point is that the product should not be new in the industry but rather a new product to the enterprise. Frequently, when an enterprise creates new products, it can gain new customers for these products. Hence, new product development can be a crucial business development strategy for an enterprise to gain a competitive advantage.

Diversification: This is the riskiest of all the four growth strategies. It involves producing new products for new markets. It requires product and market development, which may be outside the firm's core competence and has often been referred to as a "Suicide Cell" (Afande, 2015). However, diversification may be a reasonable choice of the high risks and is accompanied by the chance of a high rate of return, which can come from a large volume of customer patronage that will absorb the production and marketing cost, thereby creating and sustaining superior marketing performance, plus competitive advantage (Afande, 2015). This is usually effective and efficient when the core and distinctive competency, capability, and technology are used and integrated in a way that creates and captures value along the enterprise value chain (Porter, 2012).

Small and Medium-scale enterprises (SMEs) Defined

Small-scale businesses have been debated as different individuals, nations, and groups define them to suit their systems and purposes (Boniface & Israel, 2015). Thus, some authors have defined small-scale business from the standpoint of its relevance in the development of any economy (Boniface & Israel, 2015).

The Nigerian Companies and Allied Matters Act (1990) Section 376 gave a blueprint for the characterization and possible definitions of small companies, which are:

a) Private companies limited by share and business turnovers for the year;
b) The net assets value of the company not more than ₦1 million or such amount may be fixed by the commission;
c) None of the members of the company is a government agent or nominee;
d) None of the members is an alien;
e) The company's directors hold at least 50% of the company's equity share capital (AMA, 1990).

However, according to the Organization for Economic Cooperation and Development (OECD), the characteristics of SMEs reflect not only the economic pattern of a country but also its social and cultural dimensions. These differing patterns are noticeably reflected within different definitions and criteria for SMEs adopted by different countries where some refer to the number of employees as their distinctive criteria, others use invested capital, and some use a combination of the number of employees, invested capital, sales, and industry (Abiodun & Harry, 2015).

Theoretical Review

Theories relevant to this study were reviewed. These theories captured the background for the conceptual frameworks of this study.

Structure-Conduct-Performance Framework (Bain, 1968)

The Structure- Conduct-Performance model was developed by Bain in 1968. This theory proposes that a firm's performance, especially in terms of profitability, is determined solely by the structure and competitive dynamics of the industry within which it operates. The source of values for the firms to create profitability is embedded in the end-product strategic position. The strategic position is the set of unique value-creation activities that differentiate a firm from its competitors in any industry (Robert & Gathinji, 2014; Sherperd et al., 2014). The essence of discussing this theory is its relevance in explaining the market-based view of strategy (Wang, 2014). This can be explained using *Porter's Five Forces Model* discussed below.

Porters Five Forces Model (Porter, 1980)

This model was developed by Michael Eugene Porter of Harvard Business School in 1980. In his book, "Competitive Advantage," Porter (1980) claims that companies competing in a given industry must fulfill many different activities that form cost, create value, and grow profit. Using the competitive framework, a firm aims to position itself sustainably and profitably against the forces shaping and reshaping the industry. These forces are the supplier's bargaining power, the buyer's bargaining power, pressure from substitutes and potential entrants, and the intensity of rivalry in the industry (Porter, 1980, 1985, 2012). The essence of this model is to expatiate the concept of the five forces model of Porter (1980) afore-discussed in this framework.

Sales and Profit Maximization Model (Semion, 1980).

The sales and profit maximization model, commonly called the "profit-sacrificers" model, was developed by Nobel Laureate Herbert Semion in 1980. This economist believed that though the major objective of an enterprise is profit maximization, there is also the need to sacrifice part of this profit to increase sales volume. Those firms that adopt this profit sacrifice instead of profit maximization are called "Profit-Sacrifices."The essence of the model is that when part of the profit is sacrificed, it leads to an increase in sales volume through price cuts and penetration pricing (reduction in price) or using low prices for the firm output. Such a strategy will increase market share and sustainable superior performance with a competitive advantage (Tresh, 2001). This model was discussed to explain sales volume and market share as some of the marketing performance indicators (as one of the dependent variables of the conceptual framework).

The sales and profit maximization model, commonly called the "profit-sacrificers" model, was adopted as the theoretical anchor for the study. This model was discussed to explain sales volume and market share as the indicator of marketing performance as the dependent variable of the framework.

Empirical Review

Some studies have been conducted on the BOS and organizational performance. Some of them are discussed herein. Randall (2015) researched the role of BOS in influencing customer offerings in the competitive market. They concluded that BOS was the first approach that got the right customer offering by linking value innovation and implied BOS strategists got sagacity in reconstructing market boundaries by exploring non-customers rather than looking for existing ones. The study confirms BOS's role of innovation and value in helping organizations survive in competitive markets (Dehkordi *et al*., 2012).

Aspara *et al.* (2008) conducted an empirical study on BOS-taking CEOs and sales directors of Finnish companies, and the finding suggests that "active strategic networking aiming at creating new a) network

roles, b) value creation logics, and c) benefits feeds into profitable growth among respondents." Their result suggests that "an increase in strategic emphasis on the creation of novel value by transforming traditional industry-specific roles, relationships, and business models has a significantly positive impact (β = 1.17842) on firm profitable growth and an increase in strategic emphasis on selling the firm's expertise within business networks to create novel value, ultimately to consumers, may also have marginally significant positive effect (β = .64358) on firm profitable growth". Agnihotri (2015), in his study, suggested extended boundaries of BOS as well as advocated the applicability of strategy canvas for all types of innovation. Furthermore, these boundaries can be created via radical innovation, disruptive innovation, frugal innovation, and purely differentiation strategy and focused differentiation strategy rather than only value innovation". The author also explored better options for the profitability of BOS or sustainable competitive advantage. To make a smart strategic approach that matters centrally, creating Blue Ocean is appropriate to assist in exploring opportunities in the market space, which is the root of growth. They recommended implementing BOS to break and speak out of the box for those companies that want to make a difference and build future benefits from stakeholders (Low & Ang, 2012).

Borgianni *et al.* (2012) presented in their study the past success stories of businesses using the BOS approach of the value innovation dimensions and mentioned certain strategies based on established or overlooked customer needs fulfillment provide a greater market appraisal. Hsu *et al.* (2012) applied the concept of chance discovery and KeyGraph to discover hidden BOS for those decision-makers who are unfamiliar with the concept and showed that BOS is not recognized with the traditional approach, and on the contrary, the subjects could easily find explicit scenarios of BOS, and recognize a few of implicit scenarios. Malaysian small businesses, especially halal food producers, could be transformed into global SMEs using BOS through value creation and low cost, avoiding the conventional way of intense competition.

Gandellini & Venanzi (2011) proposed a new strategy in their study, namely Purple Ocean Strategy, from the weaknesses identified in the BOS by developing and integrating that strategy to support small and medium enterprises' strategic realignment in the recovery phase after the great economic recession in 2008-2009 "that equips managers with the qualitative and quantitative tools for "piloting" the key Competitive Success Factors [KCSFs], in terms of both managing the components of value and measuring its economic and financial impact." This methodology allows identification and implementation of strategic moves based on value creation and thus allows Blue Ocean firms generating profits and introduces 3 operational and quantifiable constructs of (i) investment curve specifying actual amount of investments having impact on KCSFs, (ii) value generated by investments based on relative importance assigned by market to KCSKs, and (iii) value/price ratio having impact on firm's market position based on demand elasticity and expected competitors' behavior assumptions. In ROS, the serious contradiction between cost and differentiation can be solved using the Theory of Inventive Problem Solving (TRIZ), which is similar to BOS in many ways (Hsiao, 2019).

METHODOLOGY

The study was conducted in Abia and Imo States in the South-Eastern geopolitical zone of Nigeria. These two states were selected because they have urban areas where SMEs operate. The research concentrated on registered SMEs operating in the following five (5) markets: 1. Table Water, 2. Food and Beverages, 3. Hotel and Eateries, 4. Supermarkets, and 5.Bakery and Confectioneries. These five markets operate in more competitive, fragmented industries (Afande, 2015; Adeniyi, 2013). The study adopted a causal survey research design. The respondents' opinions were elicited through a well-structured 4-point Likert-scale questionnaire. The questionnaire was administered to the target respondents, namely the owners, managers, and employees of the selected Small and medium-scale enterprises (SMEs) in the study area. A sample size of 250 was used for the study, which was computed from a population of six hundred and sixty-one (661) through Taro Yamen's method. This population comprised the staff of those SMEs that operate within the ambiance of the five (5) selected Small-scale Enterprises. Thus, the population of the study was the summation of the staff strength of the twenty (20) SMEs. Given its capacity to establish causal relationships, a multiple regression model was used to test the hypothesis.

We adopted content validity to ascertain whether the question items in the questionnaire were *in tandem* with the study topic, objectives, research questions, and hypotheses.

The reliability of the research instrument was done through test-retest content reliability, focusing on the questionnaire's capacity to elicit the respondents' opinions. In the course of this, ten (10) copies of the questionnaire were administered to my colleagues. Moreover, a correlation model was adopted to test the capacity of the questionnaire to generate data for the study. The test-retest results are presented herein.

Furthermore, the decision was based on the Crombach Alpha Model. The formula for the Cronbach Alpha Model is stated thus:

$$\propto = \frac{N * \bar{C}}{\bar{V} + (N-1) * \bar{C}}$$

Where:

N = Number of Items.

$\bar{C}$ = Average co-variance between pairs.

$\bar{V}$ = Average Variance.

The pre-test and post-test results were presented in Tables 1 and 2, respectively.

Table 1: Pre-test results of Cronbach Alpha Reliability Test

Crombach Alpha	No. of Items
.74	10

At 95 confidence level (5% significant level)

Source: Researcher, 2019.

Table 2: Post-test results of Cronbach Alpha Reliability Test

Cronbach Alpha	No. of Items
.76	10

At 95 confidence level (5% significant level)

Source: Researcher, 2023.

Tables 1 and 2 indicate the results of our test-retest of 0.74 and 0.76, which were above 0.70 (as the benchmark criterion). We therefore accepted the research instrument as reliable for data collection for the study. However, using the Crombach Alpha Model adopted and the result of not less than 0.75, the reliability test was judged as acceptable for the instrument reliability (Onyedijo, 2016).

The tool used for data analysis was multiple regressions. They were adopted based on the nature of the study. However, the multiple regression model formula is stated thus: Y = $f(X_1, X_2, X_3, X_4, U)$.

Y = Market Share

X_1 = Innovation Strategy

X_2 = Penetration Pricing Strategy

X_3 = Differentiation Strategy

U = Error Term

The variables of the study were measured using the Blue Ocean Strategy indices. This was adopted and modified for data collection for the study. Thus, respondents were instructed to indicate by ticking to the extent they agreed or disagreed with the statements stated in the questionnaire. Their responses were rated using a four (4) point rating system as follows: SA – 4 (Strongly Agree); A-3 (Agree); D-2 (Disagree); SD-1(Strongly Disagree). Efforts were made to ensure clarity and brevity in item construction. This removed all uncertainties that the respondents may come across.

RESULTS AND DISCUSSIONS

Test of hypotheses

Table 3: Blue Ocean Strategy and Market Share Growth of Selected SMEs in Imo and Abia States, Nigeria

Variables	+Linear function	Exponential Function	Semi-log Function	Double-Log Function
Constant	7.461	2.223	2.082	7.301
	(5.041)***	(3.667)***	(5.212)	(1.332)*
X1=Innovation Strategy	323.720	188.290	2.047	2.315
	(4.358)	(5.736)	(2.038)	(3.119)
X2=Penetration Pricing Strategy	1.221	4.511	2.322	2.333
	(2.750)***	(2.572)***	(4.310)***	(5.420)***
X3= Differentiation Strategy	0.025	0.016	0.548	0.355
	(1.827)**	(2.33) **	(0.954)	(1.996)**
R^2	0.8500	0.536	0.646	0.781
F-ratio	51.123	2.333***	9.028***	29.773***

Source: Computed from field survey data, 2023.

Figures in parenthesis are t-value
+ = Lead equation
*** = Significant at 1% probability level
** = Significant at a 5% probability level
* = Significant at a 10% probability level

Discussion of findings

The R^2 (coefficient of multiple determination), which is 0.850, shows that the model's 85.0% variation in profitability is accounted for by the independent variables included in the model, and it indicates goodness of fit. About 15% can be attributed to errors and omitted variables in the model. However, the linear function was chosen as the lead equation.

Value innovation strategy as a dimension of blue ocean strategy was significant at a 1% probability level and positively affected the share growth of the selected SMEs in the study area. This implies that an increase in reduction leads to a decrease in product [ice of the selected enterprise. This leads to increased customer patronage, leading to the share growth of the selected food and eatery SMEs in the study area. It was in support of this finding that Agnihotri (2015), in his study, suggested extended boundaries of BOS as well as advocated applicability of strategy canvas for all types of innovation and said BOS is applicable in emerging markets and it "can be created via radical innovation, disruptive innovation, frugal innovation, and purely differentiation strategy and focused differentiation strategy rather than only value innovation." He also explored better options for the profitability of BOS or sustainable competitive advantage. To make a smart strategic approach that matters centrally, creating Blue Ocean is appropriate to assist in exploring opportunities in the market space, which is the root of growth. They recommended implementing BOS to break and speak out of the box for those companies that want to make a difference and build future benefits from stakeholders (Low & Ang, 2012).

Penetration pricing strategy as an indicator for blue ocean strategy was significant at a 5% level of probability and positively affected market share growth of the selected food and eatery SMEs in the study area. This implies that price reduction, which may have come from cost reduction techniques in production and distribution networks, leads to increased product availability and market share growth of the selected SME products, increasing market advantage (the sales volume).

Differentiation strategy as an element of the blue ocean strategy was significant at 5%. It positively affected the market share growth of the selected food and eatery SMEs in the study area. This implies that improvements in food packaging, service delivery, and interior design. have differentials as promotional tools for the selected SMEs in the study area. This confirms that an increase in differentiation strategies has marketing communication activities, which helps firms influence customer purchase decisions and leads to increased demand for goods in the market generally (Owomoyela *et al.*, 2013).To support this finding, Gandellini & Venanzi (2011) proposed a new strategy in their study, namely the Purple Ocean Strategy, from the weaknesses identified in the BOS by developing and integrating that strategy to support small and medium enterprises' strategic realignment in the recovery phase after the great economic recession in 2008-2009 "that equips managers with the qualitative and quantitative tools for "piloting" the key Competitive Success Factors [KCSFs], in terms of both managing the components of value and measuring its economic and financial impact." According to them, this methodology allows identification and implementation of strategic moves based on value creation and thus allows Blue Ocean firms to generate profits and introduces 3 operational and quantifiable constructs of (i) investment curve specifying actual amount of investments having impact on KCSFs, (ii) value generated by investments based on relative importance assigned by market to KCSKs, and (iii) value/price ratio having impact on firm's market position based on demand elasticity and expected competitors' behavior assumptions. In ROS, the serious contradiction between cost and differentiation can be solved using the Theory of Inventive Problem Solving (TRIZ), which is similar to BOS in many ways (Hsiao, 2019).

CONCLUSION AND RECOMMENDATIONS

The study established that value innovation strategy as a dimension of the blue ocean strategy was significant at a 1% level of probability and positively affected the market share growth of the selected SMEs in the study area. Penetration pricing strategy as an indicator for blue ocean strategy was significant at a 5% level of probability and positively affected the market share growth of the selected SMEs in the study area. Lastly, the differentiation strategy as an element of the blue ocean strategy was significant at 5% and positively affected the market share growth of the selected SMEs in the study area. This implies that improvement in product quality, packaging, service delivery, interior design, and low pricing (and implicit cost reduction strategies) have differential effects as competitive tools for the selected SMEs in the

study area. This confirms that improving customer offering strategies helps firms influence customer purchase decisions, which generally increases the demand for goods in the market (Owomoyela *et al.,* 2013). Against the backdrop of the findings, we recommended that SMEs manage their use of value innovation strategy effectively by improving product quality, packaging, service delivery, and marketing. Also, the cost of product attributes such as package, shape, size, and color should be evaluated for value analysis; The firm should consolidate its penetration pricing strategies. Such will increase consumer purchases and sales for the SMEs' products in the long run, with cost control that will give room for market penetration and pricing strategy. There is a need to embark on integrated product differentiations for goods and services. Adopting integrated marketing communication for promotional activities for the firm's product positioning. This will influence the purchase decisions of the customers of the SMEs. Governments should create an enabling environment for the operation of these SMEs. They should support SMEs in Nigeria through ANIT-TRUST LAWS against the Larger and multinational firms that operate to swallow these SMEs.

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DYNAMICS OF RELATIONSHIPS BETWEEN INSURANCE MARKET DEVELOPMENTS AND ECONOMIC GROWTH: EVIDENCE FROM NIGERIA

[1]Okereafor, Geff, [1]Nto, Chioma P. and [3]Uwazie, Iyke Uwazie
[1]Department of Marketing, [2]Department of Economics
Micheal Okpara University of Agriculture Umudike Umuahia
Corresponding author: geffir.ok@gmail.com

ABSTRACT
The insurance industry remains one of the major indices for measuring the growth and maturity of national wealth.This study examined the Dynamics of relationships between insurance market development, and economic growth in Nigeria using the Johansen approach to cointegration analysis and the Vector Error Correction Model (VECM) on yearly data over the period of fifty years(1971 to 2021). The results show that total premium (life and non-life) to nominal GDP exerts positive and significant impact on real GDP in the long run. Insurance Density exerts negative and significant impact on real GDP. The study established weak relationship between insurance development and growth in Nigeria. The study recommends the need to establish financial institutions that would strengthen and resolve the institutional and structural problems in the economy and create structures that would sustain other causal factors that mediates growth and financial intermediation (insurance side) where appropriate.
Key Words: Insurance, Market, Development, Economic Growth.

INTRODUCTION

The insurance industry is a strategic industry and critical to for growth and catalyst for sustainable development, since it facilitates the mobilization and utilization of investment funds (Irukwu in Okehi (2005). Thus, the insurance market, as a component of the financial sector, plays a crucial role in economic development not only at the macro-economic level but also in terms of the activities of businesses and individuals. Inferring from a finance-growth nexus, Patrick (1966) postulates two possible relationships between the financial sector and economic growth. The first strand is the case where the financial sector has a supply-leading relationship with growth, and where economic growth can be induced through the supply of financial services. The second strand is a demand-following relationship where the demand for financial services can induce growth of financial institutions and their assets. In the last couple of decades, the insurance sector has witnessed significant growth worldwide and Nigeria is no exception to this emerging development. According to the finance-growth nexus theory, financial development (through financial intermediaries) promotes economic growth (Levine, 2004). Among financial intermediaries, insurance companies play an important role as they are the main risk management tool for companies and individuals. The insurance sector plays a critical role in a country's economic development as it acts as a mobilizer of savings, a financial intermediary, a promoter of investment activities, a stabilizer of financial markets and a risk manager. While the life asassurance policy sector plays a key role in providing risk cover, investment and tax planning for individuals; the non-life insurance policy sector provides a risk cover for assets. This non-life policy sub-sector is typically closely linked with macroeconomic factors (e.g. inflation, currency controls and the national income of a country), regulation and supervision, and the achievement of national development objectives, as well as the international trade regime. With its dual commercial and infrastructural roles, the insurance sector has attracted good interest in the context of privatization and liberalization. The rising importance of insurance in the globalized world is evident from the phenomenal increase in the number of players in both the domestic and international markets (IRDA)

In Nigeria, however, the importance of the insurance industry as a subset of the financial system has been neglected over the years as most studies on the interaction between the financial sector and economic growth have focused mainly on the banks and the stock markets. In any case, recent developments indicate a growing attention and a shift towards the interaction between the non-bank financial intermediaries such as the insurance companies, in line with the work of King and Levine (1993); where it was revealed that non-bank financial intermediaries such as the insurance companies have over the years played critical roles in enhancing the efficient functioning of the financial system through its intermediation function.

From the foregoing, it could be observed that the number of empirical studies is relatively small, especially in relation to those on banking contribution to economic growth (Haiss & Sümegi, 2008). In order to

contribute to filling the gap, the study focused on examining the insurance-growth nexus using Nigerian data from 1971 to 2021.

The major role of an economy's financial sector is helping to channel resources from surplus unit to the deficit units for investment. Therefore, the financial sector improves the screening of fund seekers and the monitoring of the recipients of funds, thus improving resource allocation, mobilizes savings, lowers cost of capital via economies of scale and specialization, provides risk management and liquidity. Insurance companies could play a major role in these functions if properly managed thus, supporting economic growth. However, in Nigeria, based on the nation's experience of stunted growth; the insurance sector has not actually contributed meaningfully in its role of effectively mobilizing funds for productive investment which could lead to growth.

Therefore, the assured safety of life and property which enhances trade, transportation and capital lending and many sectors are not heavily reliant on insurance services. It is against this background of insufficient funding from major financial sectors of the economy that could drive Nigeria's economic wellbeing, as alternative sources of funding becomes imperative. Thus, it behoves on researchers and policymakers to attempt at re-examining the role of insurance in enhancing economic growth in developing countries. Moreso, there seems to be insufficient studies in this area especially in Nigeria; hence, this study is undertaken to critically examine the impact of the Nigerian insurance market on economic growth, by critically looking at nexus between insurance premium and real GDP, insurance density and real GDP and causal link between insurance market development variables (total insurance premium and density) and real GDP in Nigeria.

LITERATURE REVIEW

Total Insurance Penetration (TIP)

Insurance companies are similar to banks and capital markets as they serve the needs of business units and private households in financial intermediation. The availability of insurance services is essential for the stability of the economy and can make the business participants accept aggravated risks.

Insurance Density (ID)

Insurance density is measured as the total premium divided by population (defined as premium per capita). The premium income directly depicts the interest of the economy in insurance coverage; thus it was used to capture the level of insurance market activity in Nigeria. Insurance market activity is expected to be positively related to economic growth, this implies that the higher people demand for insurance premiums, the higher the economic growth in the country. Therefore in line with the work of Ward and Zurbruegg (2000), this study adopted this measure as a proxy for insurance density.

Theoretical Review

The theoretical underpinnings of the relationship between financial development and economic growth can be traced back to the works of Schumpeter (1912), McKinnon (1988) and Shaw (1973). Schumpeter (1912) explains that a well-developed financial system can facilitate technological innovation and economic growth through the provision of financial services and resources to investors who are ready to invest in new products. The foregoing argument which was later advanced as the McKinnon-Shaw (1973) hypothesis, is a policy analysis tool for developing countries with strong recommendations for high capital accumulation and deregulated financial system. In essence, McKinnon-Shaw (1973) believes that misallocation of resources, interest ceilings, poor investment and inefficiency are usually associated with the policy of financial repression that was prevalent in the 1960s and 1970s in the Less Developed Countries (LDCs), which hinder financial development and ultimately reduce growth. Therefore, the viable alternative is financial liberalization which stimulates saving and investment, ultimately leading to high economic growth.

Empirical Review

For selected African countries, Akinlo and Apanisile (2014) examined the relationship between insurance and economic growth in sub-Saharan Africa over the period:1986-2011. Pooled OLS, Fixed Effect Model and Generalized Method of Moment Panel Model were employed in the estimation. The estimations of the dynamic panel-data results show that insurance has positive and significance impact on economic growth in sub-Saharan Africa. There result showed that premium contributes to economic growth in sub-Saharan Africa which means that a well-developed insurance sector is necessary for the economic development.

Ilhan and Bahadir(2011) investigated the relationship between the insurance sector and economic growth for a group of 29 countries for the period 1999 to 2008. The study observed that the insurance sector

positively affected economic growth in the sample countries. Zouhaier (2014) examined the relationship between the insurance business and the economic growth of 23 OECD countries over the period 1990–2011, using a static panel data model. The key findings emerged from the empirical analysis show a positive impact of non-life insurance, as measured by the penetration rate on economic growth and a negative effect exerted by the total insurance and non-life insurance, as measured by the density on economic growth.

METHODOLOGY

Econometrics model is used in this study, which is based on empirical evidence. Econometrics is a branch of economics that uses statistical tools to estimate economic relationships, test economic theories, and evaluate and implement government and company policies (Wooldridge, 2010). According to Koutsoyiannis (1973), the four steps of econometrics study will be followed in this case.

Model Formulation and Specification

Theoretical Framework

The study attempts to ascertain the extent to which Nigeria's economy is linked to its insurance sector. Thus, the endogenous growth model with a modified Cobb-Douglas production function is adopted. As a result, the Cobb Douglas function accurately depicts an economy's output after accounting for labour and capital. In line with the findings by Haiss and Sümegi (2008), Akinlo and Apanisile (2014), the following is the specified value for the aggregate output: $Y = AK^{\alpha}L^{1-\alpha}$

Where $Y = aggregate\ GDP, L = labor, K = capital\ and\ A = TFP$

Also, Y measures economic growth (proxy with real GDP per capita). K denotes the amount of capital (measured by gross fixed capital formation). L denotes the amount of labour (measured by labour rate). A is a parameter that captures the effects of other production factors, also known as the efficiency parameter. Technically, A measures the Total Factor Productivity (TFP).

Augmenting the neoclassical Cobb Douglas Production function by incorporating insurance development, by taking logarithm of both sides and differentiating Equation (1)

$$\Delta ln(y) = lnid + \alpha \Delta ln(k) + \beta \Delta(h) \quad (1)$$

A denote TFP as a function of financial sector development variables A=f(id).

Where; y= real GDP

TIP= total insurance premium(life + non-life insurance), (2)

Insurance density: the average value of the insurance premium paid by an inhabitant across one year (insurance density)

Model Specification on the Impact of Insurance Development on Economic Growth

The following model represents the relationship between insurance sector development and economic growth by

$$lnrgdp = f(lnINPgdp, lnIPENE, lnHABr, lnKAP) \quad (3)$$

Econometrics Specification of the Model

$$lnrgdp = \alpha_0 + \alpha_1 lnINPgdp + \alpha_2 IPENE + \alpha_3 LGFCF + \alpha_4 LABR + \varepsilon_t \quad (4)$$

Measurement of Variables and Apriori Expectations

Table 1. List of Variables

Variable	Definition/ A priori Expectation
Rrgdp	*Per capita economic growth*: percentage change in per capita gross domestic product
GFCF	capital stock is measured by gross capital formation % gdp (+)
lABR	Labour force is measured by the population of those in the working age group (+)
INPENE	Total Insurance density: Direct domestic premiums (both life and non-life) per capita in local currency unit LCU
INPgdp	Total insurance penetration: Direct domestic premiums (both life and non-life) as a percentage of gross domestic product.(+)

Source: Central Bank of Nigeria (CBN) Statistical Bulletin
Sector contributions are calculated as % of total GDP (constant 1990local currency)

Technique of Analysis
Johansen Co Integration Test

The test of the presence of long run equilibrium relationship among the variables using Johansen Co integration test involves the identification of the rank of the n by n matrix ∏ in the specification given by;

$$\Delta Y_t = \beta + \sum_{i=1}^{k-1} \Gamma_i \Delta Y_{t-1} + \prod Y_{t-k} + \varepsilon_t \quad (7)$$

There is a difference operator Δ and coefficient matrices ∏, k is the lag length, and Y_t is the column vector of variables. A singular matrix indicates that the rank of the cointegrating vector is zero in the absence of one. These two likelihood ratio tests will be used to determine whether or not Johansen cointegration is present: trace (trace) and maximal eigen value (max).

$$J_{trace} = -T \sum_{i=r+1}^{n} \ln (1 - \hat{\lambda}_i) \quad (5)$$

$$J_{max} = -T ln(1 - \hat{\lambda}_{r+1}) \quad (6)$$

r is the number of series, T is the number of observations, and is the calculated eigen values. An alternate hypothesis of co-integrating vectors is tested against the null hypothesis of co-integrating vectors in the trace test. An alternative test is that which examined whether the null hypothesis of r co-integrating vectors alternative hypothesis of r +1 co-integrating vectors. In the presence of co-integration, Vector error correction model (VECM) is useful to explore causality if the two series are co-integrated.

Vector Error-Correction Modelling (VECM)

The Vector Error-Correction Model is used to test the short-run and long-run equilibrium connection (VECM) among the variables of interest. Restrictions on cointegration are built into the VECM specification. This model- VECM analysis is function-based: y_t = f(INPENE, INPgdp, GFCF, LABR). The cointegration under the framework of VECM is presented into three co-integrated time series is set as thus:

Diagnosis Tests

Tests will be conducted to determine whether or not the research model has econometric issues. Autocorrelation and heteroscedasticity are examples of multicollinearity and autocorrelation tests.

RESULTS AND DISCUSSION

Using OLS, it was possible to determine the strength of the correlation between the dependent variables and the independent variables. Negative coefficients indicate an inverse relationship between the variable and the dependent variable. The dependent variable will drop by the negative coefficient if the independent variable increases by a unit amount. If all other variables are maintained constant, the coefficient shows the predicted change in the dependent variable for every 1 unit change in the linked explanatory variable. A statistically significant model has a probability (p-value) less than 0.05. Mathematical correlations between the variables were discovered in this investigation. For this study, we gathered and utilized data on the nominal GDP contributions of life and non-life insurance premiums, insurance penetration/density (the ratio of total premiums to the population), gross fixed capital formation, the total labour force, and real GDP. All three variables were entered into three separate multiple regression models, each with its unique coefficients. In this case, the variables are left exactly as they were.

Model Estimation for LRGDP

For the static regression analysis, LRGDP was regressed on LLINPGDP, LIPENE, LABOUR, and LGFCF. The results are shown in Table 2 below. It is expected that the coefficients will be greater than zero. The results in Table 2 are in line with the a priori expectations.

Table 2: Results of Level Series Multiple Regression estimates of Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LLINPGDP	-0.072101	0.066002	-1.092398	0.2843
LIPENE	0.108958	0.016421	6.635389	0
LHABOUR	0.378645	0.1539	2.460333	0.0206
LGFCF	0.252717	0.067261	3.757251	0.0008
C	6.532063	2.998826	2.178206	0.0383
R-squared	0.891479	Mean dependent var		12.41742
Adjusted R-squared	0.875402	S.D. dependent var		0.293089
S.E. of regression	0.103456	Akaike info criterion		-1.55674
Sum squared resid	0.288985	Schwarz criterion		-1.32772
Log likelihood	29.90785	Hannan-Quinn criter.		-1.48083
F-statistic	55.45002	Durbin-Watson stat		0.762722
Prob(F-statistic)	0			

Source: Author's estimation using E-view 10

LRDP was then regressed on LLINPGDP, LIPENE, LABOUR, and LGFCF in the static regression analysis shown in table 4.2 above. For example, we can expect the estimate coefficient to be greater than zero in the following order: (Y_1> 0, Y2> 0, Y_3> 0, Y_4> 0,)). The findings are inconclusive compared to predicted a priori, which is a mixed for economic theory. There is amazing goodness of fit with high F-statistics and substantial p-values in the computed equations, making for remarkable econometric features. R^2 and the adjusted R^2 are significant in the regression analysis, as was expected. These results suggest that the independent variables can account for a significant proportion of the variance in dependent variable. Autocorrelation is present in the level series regression in all three models above, suggesting that our regression results should be regarded with a degree of caution. A strong justification for running unit root tests was provided by finding that the D-W values obtained was incorrect.

Presentation and Interpretation of Empirical Results

Result of Johansen Cointegration Result

Following the unit root test, we proceed to use the Johansen technique to see if there is at least one combination of these variables that is I(0). The following table summarizes the results of the Johansen cointegration test:

Table 3: Johansen Cointegration Test Results

Unrestricted Co-integration Rank Test (Trace)				
Hypothesized		**Trace**	**0.05**	
No. of CE(s)	**Eigenvalue**	**Statistic**	**Critical Value**	**Prob.****
None *	0.702478	114.27	79.34145	0
At most 1 *	0.66193	73.05289	55.24578	0.0006
At most 2 *	0.411878	36.17982	35.0109	0.0373
At most 3	0.339829	18.13193	18.39771	0.0544
At most 4 *	0.111335	4.013201	3.841466	0.0451
Trace test indicates 3 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Co-integration Rank Test (Maximum Eigenvalue)				
Hypothesized		**Max-Eigen**	**0.05**	
No. of CE(s)	**Eigenvalue**	**Statistic**	**Critical Value**	**Prob.****
None *	0.702478	41.21707	37.16359	0.0162
At most 1 *	0.66193	36.87308	30.81507	0.0081
At most 2	0.411878	18.04788	24.25202	0.2668
At most 3	0.339829	14.11873	17.14769	0.1309
At most 4 *	0.111335	4.013201	3.841466	0.0451
Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: *Extraction from estimation output using E-views 10*
Note: * shows the rejection of null hypothesis at 5%
Johansen's Co-integration technique yielded the results shown in Table 4.3.3. At a 5% level of significance, the test indicates one (1) co-integrating equation based on Trace Statistics and Max-Eigen Statistics. Consequently, it is possible to reject the null hypothesis of no co-integration with 95% confidence because both trace test and maximum eigenvalue statistics are over their critical thresholds. As a result, the findings point to the presence of long-term relationships among the factors examined.

Long Run Estimates

For the long run, the normalized co-integration result with regards to real GDP shows evidence of the long-run dynamic adjustment among real output as a proxy for economic growth, total premium to nominal GDP (INPGDP), the total insurance premium for population (IPGDP), labour, and gross fixed capital formation to nominal GDP (GFCF) as shown below:

Table 4: Long run Estimates

LRGDPPC(1)	LLINPGDP(1)	LIPENE(1)	LHABOUR(1)	LGFCF(1)	C
1.000000	0.943824	-0.119145	1.922327	0.603712	29.28983
	(0.15197)	(0.03484)	(0.25561)	(0.13399)	
	[6.21070]	[-3.42010]	[7.52048]	[4.50551]	

Source: *Extraction from estimation output using E-views 10*

Co-integration coefficients for our independent variables are shown in the table above using the normalized co-integration equation. As a result of normalization, the variables' signs have been inverted. It demonstrates the relationship between the dependent variable and each of the independent variables. In the following sections, we discuss the effects of each unique variable:

Evaluation of Hypothesis/Significance of Independent Variables to Economic Growth

Hypothesis 1: Total Insurance (INPGDP)

H0: $\beta_1 = 0$

H1: $\beta_1 \neq 0$

Decision Rule: Reject H_0 if p-value is less than 5% level of significance. Otherwise, do not reject H_0 and accept H_1

Decision: Reject H0 since p-value (long run) is lesser than significance level of 0.05.

Conclusion: Total Insurance (INPGDP) exerts significant influence on real GDP

β_1**=** Total Insurance (INPGDP). A % change/increase in INPGDP is associated with a 0.9438% change/increase in RGDP on average citrus paribus in the long run

Hypothesis 2: Insurance density (IPENE)

H0: $\beta_2 = 0$

H1: $\beta_2 \neq 0$

Decision Rule: Reject H0 if p-value is less than 5% level of significance. Otherwise, do not reject H_0 and accept H_1

Decision: Reject H0 since p-value (long run) is lesser than significance level of 0.05.

Conclusion: Insurance density (IPENE) exerts significant influence on real GDP

β_2**=** Insurance density (IPENE).Any % change/decrease in IPENE is associated with a 0.1191% change/increase in RGDP on average, ceteris paribus, in the long run.

Hypothesis 3: Causality: Insurance density (IPhypothesis

H1: $\beta_3 \neq 0$

Decision Rule: Reject H_0 if p-value is less than 5% level of significance. Otherwise, do not reject H0 and accept H_1

Decision: Do notReject H0 since p-value (short run) is greater than significance level of 0.05.

Conclusion: Insurance density (IPENE) and Total Insurance (INPGDP) do not exert significant causal influence on real GDP in the short run.

β_2**=** Insurance density (IPENE): No causal relationship with real GDP

Insurance density (IPENE): No causal relationship with real GDP

CONCLUSION AND POLICY IMPLICATIONS

The traditional role of insurance in risk management is that of an intermediary; and as a supplier of risk transfer and indemnity has inspired this study. Insurance helps the economy grow by allowing different risks to be managed more efficiently by promoting long-term savings, encouraging capital accumulation, acting as a conduit pipe for channelling funds from insurance policyholders to investment opportunities and mobilizing domestic savings into productive investments. Using the Johansen approach to co-integration analysis and the Vector Error Correction Model, this study evaluates the impact of insurance sector expansion on economic growth from1971 to 2021. Cobb Douglas production functions were used to develop an econometric model for this empirical study. The study also looked at the long-term relationships between the expansion of the insurance sector and the overall economy's growth. It employs two metrics of insurance industry development while adjusting for the probable influences of labour and capital. Given the low insurance patronage culture and development in the majority of the sample nations, the paper advocate policies and measures to raise awareness and educate people about the advantages of insuring themselves. Governments and insurance regulatory agencies in these nations should push for comprehensive financial reforms and insurance policies that support private sector participation and thus expanding the insurance industry. This is particularly relevant for African countries where the government and its agencies own insurance companies. Finally, an obligatory insurance demand plan can be introduced in these countries for both private and government employees as well as all vehicle owners in such countries.

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HUMAN RESOURCE OUTSOURCING AND EMPLOYEE PERFORMANCE IN 7UP BOTTLING COMPANY PLC. ABA PLANT, ABIA STATE

[1]Sampson Chijindu, J. and [2]Emerole, Okwudili B.
[1]Department of Management, Abia State University Uturu
[2]Department of Industrial Relations and Personnel Management,
Michael Okpara University of Agriculture, UmudikeUmuahiaAbia State
Corresponding author: sampson.chijindu@abiastateuniversity.ed.ng

ABSTRACT
The study examined the effect of human resource outsourcing on employee performance in Seven-Up Bottling Company Plc. Aba Plant, Abia State, Nigeria. The study's specific objectives were to ascertain the effect of workforce management on employee task performance, evaluate the effect of employee advocacy on employee contextual performance, and ascertain the effect of remuneration and benefits on employee adaptive performance in Seven-Up Bottling Company Plc. The study made use of a survey research design. Primary and secondary sources of data were used. A well-structured questionnaire of the closed-ended type designed on a 5-point Likert scale, titled: "Human resource outsourcing and employee performance questionnaire," was used to elicit primary data from the study respondents. The study population consisted of all Seven-Up Bottling Company Plc. Aba Plant employees, which comprised 346 employees, including the core and non-core staff (outsourced staff). Using Taro Yamane's formula at an average confidence level of 95% and error tolerance of 5%, the study sample size was deduced to be 185 employees. The researcher used content validity to validate the research instrument, while the Cronbach Alpha reliability technique was used to test the reliability of the study instrument. Purposive and random sampling techniques were used. The researcher adopted self-administration of the questionnaire. The study used Ordinary Least Square Regression to analyze the study objectives.150 valid questionnaires returned were used for the data analysis. Findings revealed that At 5% level (Sig < .05) of significance, workforce management had a positive and significant effect on employees' task performance; at 5% level (Sig < .05) of significance,employee advocacy had a positive and significant effect on employees' contextual performance and at 5% level (Sig < .05) of significance,remuneration and benefits had a positive and significant effect on employees' adaptive performance in Seven-Up Bottling Company Plc. Aba Plant. Based on these findings, the study concluded that human resource outsourcing positively and significantly affected employee performance in Seven-up Bottling Company Plc. Aba Plant. However, the study recommended that the Management of Seven-Up Bottling Company and the outsourced firms maintain workforce management. Nevertheless, they must give special attention to onboarding new employees, scheduling, time tracking, and management. Management needs to sustain employee advocacy programmes, especially listening to employee concerns, engaging employees, and aligning employees' needs and rights with the organization's. These will sustain and enhance the performance of the organization's core and outsourced staff.
Keywords: Human resource outsourcing, employee performance.

INTRODUCTION

The globalization of business operations has led to a surge in Human Resource (HR) outsourcing as organizations seek to streamline operations and enhance efficiency. Thus, the corporate landscape has witnessed a paradigm shift in organizational structures, with an increasing trend toward HR outsourcing. HR outsourcing emerged as a prevalent strategy for organizations aiming to cut costs and focus on core competencies. Organizations utilize diverse alternatives to adjust to the rapidly changing external environment, outperform competitors, and achieve strategic objectives. For several years now, outsourcing has been part of the market by which organizations divest the management of some activities to external partners to focus on core activities immediately connected with the strategic objectives. Outsourcing is deemed to have a considerable effect on employees' performance. It is often regarded as a potential source of competitive advantage and a possible strategic opportunity to increase an organization's competitiveness (Elizabeth, 2022). Outsourcing is a common practice among private and public organizations and a significant element in business strategy. Perhaps most organizations now outsource some of the functions they used to perform themselves (Radha, 2016). Today, activities that used to be performed in-house are usually outsourced to other firms (Radha, 2016).

HR outsourcing is thus becoming a way to cut costs and improve service simultaneously in manyorganizations (Rose & Mike, 2018). The thesis of outsourcing derives from the core competency

theory, which prescribes that for organizations to become and remain competitive, they must concentrate resources and efforts on their core competencies or core activities and allow others (professional agencies, vendors/outsourcers) to deliver their non-core activities and processes (Nagpal, 2008). It is also believed that by outsourcing non-core activities, the business will have access to specialized skills and knowledge, improve the quality of service employee performance, have access to new technology, and reduce operating costs by reaping the benefits of a supplier's lower cost structure, which may result from economies of scale or other advantages associated with specialization in the outsourced activity (CIPD, 2009) as the level of employee performance depends on the experience, abilities and skills of the employees, which fall within the requirement to have the necessary qualifications and experience to fill positions as integrated in HR outsourcing (Abdullah *et al*., 2020).

Seven-Up Bottling Company Plc. embraced HR outsourcing to cut costs in the face of an economic downturn; they outsourced some of theorganizational non-core functions like security, inventory, marketing distribution, merchandise, auto-repairs, and many others. However, this strategic move is not without consequences, particularly concerning the employees directly affected. The effects of this business decision on the performance of the workforce remain a subject of considerable debate. This exploration delves into the multifaceted effects of HR outsourcing on employees, scrutinizing how it influences employees' tasks, contextual and adaptive performance, and the overall work environment.

Outsourcing is a crucial function in an organization because it directly affects its operational activities. The increasing use of outsourcing arrangements and the unfamiliar complexity suggest the need to know more about effectively utilizing this strategy. Due to the diverse nature of contemporary business processes in organizations, it is nearly impossible to manage all their business processes solely depending on their expertise. Even if feasible, the organization may lose its focus and efficiency. However, the uncertainty associated with outsourcing may lead to job insecurity among employees, negatively impacting their morale and job performance. Outsourcing can result in communication gaps between in-house teams and outsourced personnel, affecting collaboration, understanding, and employee performance.

In Seven-Up Bottling Company Plc. Aba Plant, many outsourcingorganizations pay a lower salary to outsourced employees than in-house employees. Differences in work standards and expectations between the organization and outsourced personnel may result in variations in the quality of work, impacting overall performance. Also, the security of outsourced jobs is very low. Moreover, contractual/outsourcing employees suffer the most if organizations face financial crises. The perception of being replaced by outsourced workers can contribute to a decline in employee morale, potentially leading to decreased motivation and productivity. A sense of detachment among outsourced employees may result in lower levels of engagement, reducing overall commitment to the organization and impacting performance. Thus, there is no gain in saying that HR outsourcing may have affected workforce management, employee advocacy, remuneration, and benefits of the outsourced employees, which will invariably affect their task, contextual, and adaptive performance. This empirical exploration delves into these nexus given the multifaceted effects of HR outsourcing.

REVIEW OF LITERATURE

Human Resource Outsourcing

Outsourcing is defined by Fiona (2016) as a business strategy that occurs when a business purchases services or products from another or when a business pays another company to provide services that the business might otherwise have employed its staff to perform. Outsourcing involves contracting out a business process and operational and non-core functions to another party. According to Brown and Wilson (2015), outsourcing can be simply seen as providing services from an outside source. Outsourcing can be defined as the process of one company contracting with another company to provide services that might otherwise be performed by in-house employees (Sako, 2016).Outsourcing is entrusting non-core activities or operations from internal production within a business to an external entity specializing in that particular operation. George and Jones (2014) opined that outsourcing is the process of employing other organizations to perform specific jobs or work activities the organization previously performed by itself. Smith *et al.* (2016) defined outsourcing as turning over those activities outside the organization's core competencies to a supplier. Outsourcing is a process that utilizes a third party to carry out an exercise usually done by the internal staff and assets (Armstrong & Taylor, 2020).

Employee Performance

Fahmi (2017) stated that performance results from a process that refers to and is measured over a certain period based on pre-determined provisions or agreements. Mangkunegara (2016) defines employee performance as the result of a person's work in quality and quantity that employees have achieved in

carrying out their duties according to the responsibilities given. Employee performance is the achievement of a work result in a work process based on natural abilities or abilities obtained from the learning process and motivation to excel, improve individual performance, and achieve company goals. Al-Hussaini *et al*. (2019) stated that job performance refers to how well and effectively or resourcefully an individual takes action and contributes to his or her behaviors. Employee performance focuses directly on employee efficiency by ascertaining the number of acceptable goods produced by an employee in a business or work environment within a specific time frame (Igwedinmah, 2020). Employee performance is a system that consists of the processes used to identify, encourage, measure, evaluate, improve, and reward employee performance (Ofili *et al*., 2021). As previously mentioned, employee work performance can be understood by several performance measures, e.g., quality, quantity, punctuality, cost-effectiveness, accuracy, and more (Novitasari, 2020).

Empirical Review

Joy (2022) examined the impact of human resource outsourcing on employee performance in Access Bank Plc. Primary data was gathered using questionnaires, observation, and oral interviews. The questionnaires were distributed to some respondents to express their opinions and observations on their employment status and work outputs. Thus, the Bank's employees were sampled using simple random sampling, and 84 respondents were used for the study. The results showed a significant relationship between being an outsourced employee and work performance. It indicated the concept of outsourcing in the selected bank, how the outsourced employees perceive the mode and conditions of their employment, and how this perception reflects on performance. Thus, practical recommendations were made on bridging the apparent gaps between the core employees of the bank and those outsourced for improved performance and efficiency.

Suharno *et al*. (2020) examined the effect of outsourcing, organizational commitment, and employee satisfaction on the performance of outsourced employees of the Ministry of Public Works and Public Housing. This research was carried out using a quantitative method with an associative method. The study was conducted on 110 outsourced employees at the General Secretariat of Public Works and Public Housing. The sampling technique for this research was accidental sampling. The questionnaire was used for data collection. Data was analyzed by multiple linear regression analysis. The results showed significant and negative influences between outsourcing and employee performance. There were also significant and positive influences between organizational commitment and employee performance. Outsourcing, organizational commitment, and employee satisfaction significantly affected employee performance with an action coefficient of 92.4%.

Syed and Danish (2021) focused on Human resource outsourcing, employee turnover intentions, and performances in a mediatory moderated framework. The empirical validity was established by conducting a survey using a close-ended adopted questionnaire gathered from 200 employees working in different sectors of Pakistan. Data was analyzed using Confirmatory factor analysis and structured equation modeling. The result fully supported the theory and showed that human resource outsourcing increases employee turnover intentions through the mediatory role of Motivation, Job Satisfaction, Employee Relations, and Organizational Commitment. The study found a significant complementary effect of Qualification and Experience on the outsourcing turnover relationship. However, the effect of Qualification on performance was not substantiated.

Egesimba (2021) examined the effect of outsourcing strategies on the organizational performance of plastic manufacturing firms in Anambra State, Nigeria. The study's main aim was to investigate the effect of employee competence and cost reduction on organizational performance. The study adopted the quantitative research design. The research instrument used in this study was a structured questionnaire with 5 Likert rating scale response options. The population for the study was 300 employees of the plastic manufacturing firms in Anambra State. The researcher used a frequency distribution table, Likert scale, and simple percentages to analyze the data collected; the hypotheses for the study were tested using multiple regression analysis. The findings revealed that outsourcing for employee competence has a significant effect on the organizational performance of manufacturing firms in Anambra State, and outsourcing for cost reduction has a positive significant effect on manufacturing firms in Anambra State, Nigeria. The study concludes that outsourcing strategies significantly positively affected plastic manufacturing firms' organizational performance in Anambra State, Nigeria. The study recommends that plastic manufacturing firms offer better terms of service and proper training to help improve employee competence and reduce the costs of outsourcing its human resources functions for better performance.

Elizabeth (2022) investigated the effect of outsourcing human resource practices on the performance of Total Oil Company in Nairobi, Kenya. Specifically, the study sought to examine the effect of outsourcing

training practices, recruitment practices, payroll services, and human resource management information systems on the organizational performance of Total Oil Companies in Nairobi County, Kenya. The study adopted a descriptive research design that targeted all employees totaling 112 Total Oil Company functional departments at the headquarters in Nairobi County. Primary and secondary data were collected. Inferential and descriptive statistics were used to analyze quantitative data with the help of Statistical Package for Social Sciences (SPSS version 22). The results revealed that outsourcing training practices increase service delivery, reduce training costs, and increase organizational performance. The study concluded a significant positive relationship between outsourcing training practices, outsourcing recruitment, and outsourcing payroll services and organizational performance.

METHODOLOGY

The study made use of a survey research design. Primary and secondary sources of data were used for the study. The researcher used the questionnaire to elicit information from Seven-Up Bottling Company Plc. Aba Plant, Abia State employees. A well-structured, closed-ended "Human Resource Outsourcing and Employee Performance Questionnaire" was used. The questionnaire was designed in five (5) point Likert scale forms (Strongly Agreed = SA, Agreed = A, Disagreed = D, Strongly Disagreed = SD, and Neutral = N). The close-ended questionnaires had two to five options. The questionnaire was structured into 3 sections: A, B, and C, which captured the study objectives. The researcher adopted a self-administration system of questionnaire administration. The researcher distributed the questionnaire to the employees in Seven-Up Bottling Company Plc. Aba, Abia by hand and returned it after one (1) week as agreed upon with the employees to collect the completed questionnaire. The study population consisted of all Seven-Up Bottling Company Plc. Aba Plant employees, including the core staff of the organization and the outsourced staff. According to the survey undertaken by the researcher, as of August 2023, Seven-Up Bottling Company Aba Plant, Abia State, had 346 employees, both core and non-core staff, according to their Personnel Department. Based on this population, an average confidence level of 95% and an error tolerance of 5% were used to deduce the actual sample size of the study. The sample size was calculated using Taro Yamane's formula. 185 employees were computed as the sample size of the study.

The researcher used content validity to validate the research instrument, while the Cronbach Alpha reliability technique was used to test the reliability of the study instrument. The researcher employed purposive and random sampling techniques. Purposively, the core and non-core staff were sought and sampled randomly, giving them equal opportunity to participate in the study. To measure the dependent and independent variables, the researcher sought the components of the independent and dependent variables in all the study objectives and used them to design the study questionnaire into a five-point Likert scale. The study used inferential statistics and ordinary Least Square Regression Analysis to analyze the study objectives using Statistical Packages for Social Science (SPSS) version 23. Out of the 185 questionnaires distributed in Seven-up Bottling Company Plc. Aba Plant, 160 valid questionnaires were returned and used for the data analysis.

RESULTS AND DISCUSSIONS

Effect of Workforce Management on Employee Task Performance in Seven-Up Bottling Company Plc.

Table 1: Ordinary Least Regression analysis results on the effects of workforce management on employee task performance in Seven-Up Bottling Company Plc.

Variable	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	2.349	0.091		25.699	0.000
Workforce management	0.666	0.030	0.872	22.342	0.000
R^2		0.760			
R^2		0.758			
F-Statistics		499.143			

Dependent Variable: Employee task performance.
Predictor: Workforce management.
Source: Field Survey 2023.

The result in Table 1 revealed the effect of workforce management on employee task performance in Seven-Up Bottling Company Plc. The result revealed that workforce management with a regression coefficient of (0.666) is significant and positively affected employees' task performance in Seven-Up

Bottling Company Plc. at a 5% level (Sig < .05) of significance. The result shows that an increase in workforce management will positively increase employee task performance in Seven-Up Bottling Company Plc. by 0.666. Therefore, workforce management positively and significantly affected employees' task performance in Seven-Up Bottling Company Plc.

The R- R-square, which shows the proportion of variation in the dependent variable that the independent variables can explain, revealed that 76.0% of the total variation in employee task performance in Seven-Up Bottling Company Plc. was explained by the variation in workforce management. Meanwhile, the Adjusted R explains the effect of a decrease in the degree of freedom arising from the independent variable. The F-statistics (499.143) is significant at the 5% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Effect of Employee Advocacy on Employee Contextual Performance in Seven-Up Bottling Company Plc.

Table 2, Ordinary Least Regression analysis results on the effects of employee advocacy on employees' contextual performance in Seven-Up Bottling Company Plc.

	Unstandardized Coefficients		Standardized Coefficients		
Variable	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.578	0.093		16.945	0.000
Employee Advocacy	0.852	0.028	0.922	30.001	0.000
R^2		0.851			
R^2		0.850			
F-Statistics		900.045			

Dependent Variable: Employee contextual performance.

Predictor: Employee advocacy.

Source: Field Survey 2023.

The result in Table 2 revealed the effect of employee advocacy on employees' contextual performance in Seven-Up Bottling Company Plc. The result revealed that employee advocacy with a regression coefficient of (0.852) is significant and positively affected employees' contextual performance in Seven-Up Bottling Company Plc. at a 5% level (Sig < .05) of significance. The result shows that increasing employee advocacy will increase employee contextual performance in Seven-Up Bottling Company Plc. by 0.852. Therefore, employee advocacy positively and significantly affected employees' contextual performance in Seven-Up Bottling Company Plc.

The R- R-square, which shows the proportion of variation in the dependent variable that the independent variables can explain, revealed that 85.1% of the total variation in employee contextual performance in Seven-Up Bottling Company Plc. was explained by the variation in employee advocacy. Meanwhile, the Adjusted R explains the effect of a decrease in the degree of freedom arising from the independent variable. The F-statistics (900.045) is significant at a 5% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Effect of Remuneration and Benefits on Employee Adaptive Performance in Seven-Up Bottling Company Plc.

Table 3: Ordinary Least Regression analysis results on remuneration and benefits on employee adaptive performance in Seven-Up Bottling Company Plc.

	Unstandardized Coefficients		Standardized Coefficients		
Variables	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.161	0.078		14.948	0.000
Remuneration/benefits	0.963	0.022	0.961	43.600	0.000
R^2		0.923			
R^2		0.920			
F-Statistics		1900.994			

Dependent Variable: Employee adaptive performance.

Predictor: Remuneration and benefits

Source: Field Survey 2023.

The result in Table 3 revealed the effect of remuneration and benefits on employee adaptive performance in Seven-Up Bottling Company Plc. The result revealed that remuneration and benefits with a regression coefficient of (0.963) are significant and positively affected employees' adaptive performance in Seven-Up

Bottling Company Plc. at a 5% level (Sig < .05) of significance. The result shows that an increase in remuneration and benefits will positively increase employee adaptive performance in Seven-Up Bottling Company Plc. by 0.963. Therefore, remuneration and benefits positively and significantly affected employees' adaptive performance in Seven-Up Bottling Company Plc.

The R- R-square, which shows the proportion of variation in the dependent variable that the independent variables can explain, revealed that 92.3% of the total variation in employee adaptive performance in Seven-Up Bottling Company Plc. was explained by the variation in remuneration and benefits. Meanwhile, the Adjusted R explains the effect of a decrease in the degree of freedom arising from the independent variable. The F-statistics (1900.994) is significant at a 5% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Discussion of Findings

Table 1 revealed that at a 5% level (Sig < .05) of significance, workforce management positively and significantly affected employees' task performance in Seven-Up Bottling Company Plc.

The result is in consonant with Joy's findings (2022). Joy (2022) examined the impact of human resource outsourcing on employee performance in Access Bank Plc. and revealed a significant relationship between being outsourced employees and work performance.

Table 2 revealed that at a 5% level (Sig < .05) of significance, employee advocacy positively and significantly affected employees' contextual performance in Seven-Up Bottling Company Plc.

The result agrees with the findings of Suharno et al. (2020). Suharno et al. (2020) examined the effect of outsourcing, organizational commitment, and employee satisfaction on the performance of outsourced employees of the Ministry of Public Works and Public Housing. They revealed that outsourcing, organizational commitment, and employee satisfaction significantly affected employee performance.

Table 3 revealed that at a 5% level (Sig < .05) of significance, remuneration and benefits positively and significantly affected employees' adaptive performance in Seven-Up Bottling Company Plc.

The result is in agreement with the findings of Egesimba (2021). Egesimba (2021) examined the effect of outsourcing strategies on the organizational performance of plastic manufacturing firms in Anambra State, Nigeria, and revealed that outsourcing for employee competence has a significant effect on the organizational performance of manufacturing firms in Anambra State and outsourcing for cost reduction has a positive significant effect on organizational performance of manufacturing firms in Anambra State, Nigeria.

CONCLUSION AND RECOMMENDATIONS

Based on the study's significant findings, the researcher concluded that human resource outsourcing positively and significantly affected employee performance in Seven-up Bottling Company Plc. Aba Plant, as revealed by this study. The following recommendations were considered very crucial based on the findings of the study: Seven-Up Bottling Company and the outsourced firms' management must maintain workforce management as it positively affects their employees' task performance. However, they must foster a collaborative culture, encouraging employees to collaborate and share knowledge, ultimately improving overall team performance. Ensure transparent communication about tasks, expectations, and goals to minimize misunderstandings and promote a sense of direction. The Management of Seven-Up Bottling Company Plc. and the outsourced firms need to sustain their employee advocacy programs, especially listening to employees' concerns, building trust, aligning employees' needs and rights with that of the organization, and empowering employees to take ownership of their roles by providing autonomy and decision-making responsibilities. Encourage open dialogue among employees to share insights, challenges, and innovative ideas, fostering a culture of collaboration and adaptability. Ensure leadership actively supports and models contextual behavior.

The Management of Seven-Up Bottling Company Plc. and the outsourced firms must maintain their remuneration and benefits programs, fundamental pay, bonuses and incentives, overtime payment, paid leaves, and recognition. Also, they should offer competitive base salaries aligned with industry standards. Implement a robust performance-based incentive system tied to individual and team achievements. This recognizes and rewards adaptive behaviors and motivates employees to continuously enhance their skills and contribute to the organization's success.

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SMALL AND MEDIUM BUSINESS ENTERPRISE OPPORTUNITIES AND CAPACITY DEVELOPMENT IN NIGERIA – THE ABIA STATE IN FOCUS

Okoh, Patrick O. and Oko Ndu A. E.
[1]Department of Marketing Faculty of Management Sciences
Michael Okpara University of Agriculture, Umudike
Corresponding author: patokoh4u@yahoo.com

ABSTRACT
This study is aimed at identifying the drivers of small and medium business enterprises and the opportunities that can be leveraged to enhance the capacity development of SMEs as a vital part of economic development in Nigeria. The research was conducted under an exploratory survey, using quantitative approach. Data were collected using a non-probability sampling method of 30 SMEs trained in China by the Abia State Government. This population represented the sample size. The data analysis made use of correlation and multiple regression analysis to determine the level of association between the construct and predictors using coefficients. The findings established the facts behind the economic development of nations by SMEs through government assistance in infrastructure provision, financial aid, tax relief, training and use of modern technology. All the identified and tested variables were significant at a 5% level of significance and were positively related except for multiple taxation/levy, which was negatively related to the study. All the variables influence SMEs operations for pursuing opportunities for capacity development. The implication is that the study contributed to testifying for the seamless relationship between Abia State Government and the small-scale business operators since there are no mandatory guidelines in Nigeria on what the government should do for SMEs. The limitation is that the result is a single approach to the vast Nigerian experience.
Keywords: Small and Medium business, SMEs opportunities, Capacity development, Capabilities, Technology.

INTRODUCTION
Small and medium-scale businesses are the primary mechanism to harness the ever-increasing market opportunities in Nigeria when considering the ever-growing consumer population (Monye, 2015). From the 19th century of the Industrial Revolution, small-scale businesses played the key roles that brought civilization to developed nations (iEduNote, 2022). Descriptively, the small-scale business has been standing for the enterprise that is comparatively small in operational size in both geography and location outside marketing actions, and it is commonly financed by an individual or group of individuals (iEduNote, 2022) to drive the economy of nations. Small and medium-scale enterprises are born in order to create new products, as well as initiate changes through innovation and for the economic survival of people. That is, SMEs are considered the primary sector drivers of economic expansion, and they represent the most significant contributory sector in developing countries like Nigeria. In an effort to make SMEs adapt to global changes in economy, trade and technology, the Abia State government resolved to transform the shoe-making business by integrating modern technology into the business to accelerate economic activities and the attainment of sustainable economic development. This is borne out of the myriads of challenges of the Aba industrial shoe cluster which is evidenced in adequate funding following bank's disinterestedness (Faminu, 2019), use of manual methods and locally-made machines (ICiR, 2017). This was highlighted by Anichukwueze (2016) particularly from the aspect of improving the technological contribution in lifting the production of the Aba shoe cluster. In this regard, shoemakers were sponsored by the Abia State government to be trained in China particularly in automated shoemaking among other things (Ofurum, 2021). The step involved the training of 30 youths in China for skill acquisition. Consequently, the training had an impact upon the return of the 30 trained youths. According to Ofurum (2021), the state government supported the initiative with functional automated shoe companies, footwear academy and further initiatives designed to push the shoemakers to the national stage.
However, the shoemaking cluster has its challenges despite the contribution of SMEs in spurring innovation, creating employment, contributing to GDP, reduction in excessive dependence on paid government jobs, improved rate of rural development, and impacting financial performance of SMEs. Notably, the SMEs are often labour-intensive and have a high probability of folding-up in five years (Agwu & Emeti, 2014). As at 2023, Uchenna (2023) stated that SMEs in Nigeria contend with limited access to

finance, inadequate level of infrastructural development particularly from power supply, road network and access to technology that considered to be inadequate, limited access to market and fierce level of competition from larger firms, inadequate skills of the workforce and capacity especially in management capability, technical expertise and skilled labour, contention with the complex regulatory frameworks and administrative burdens. Interestingly, these are still contending challenges bedevilling the sector since 2014 as evidenced in literature (Agwu & Emeti, 2014; Tendler & Amorim, 1996; Adepoju, 2003). In other instances, there are records of multiple taxes and levies and unavailability of modern technology and other myriad of problems that revolve around inconsistent government policies and policy implementations that are inconsistent. Further, digitalization and digital transformations are difficult to integrate into production among SMEs in Nigeria following low level of technological applications among SMEs such as the shoemaking clusters in Aba where manual means are predominantly used. One of the main barriers that SMEs in Nigeria are facing is organizational and customer-related. According to Ubabukoh (2015) lack of knowledge of the application of marketing concepts and a lack of access to modern technology is critical issue among the SMEs in Nigeria thereby serving as notable challenge among the SMEs. However, these challenges could result in automation in which most of the SMEs do not have the finances to buy (automated machines) to carry out innovativeness in production and marketing, take advantage of the continuous diffusion of information and communications technology (ICT), invest in digital business models, access markets and communicate relevant information about their business. This does not reduce the significant roles and the strength of SMEs in Nigeria. The implication is that it often creates room for opportunities to be explored by SMEs that more entrepreneurial and strong-willed to succeed. Essentially, opportunities that SMEs explore are documented in literature particularly ones leading to employment creation, economic advancement and growth (Uzoho, 2019). This is often spurred by the individual's "I can" and "Me too" spirits amongst many youth. These have uplifted the dignity of labour in Nigerians such that the rewards of self-employment are becoming enormous. For instance, the "You Win", Trader money and Women in Entrepreneurship programs in Nigeria have upgraded the social status of innovative Nigerian youths in businesses who run their ventures efficiently.

However, according to the Central Bank of Nigeria (CBN) (2010), 80% of the SMEs in Nigeria have not been able to unlock opportunities in the online retail sector through marketing potentials for the growth of the Nigerian economy. This is despite the Economic Recovery and Growth Plan (ERGP) of 2017 to 2020 as introduced by the government of Nigeria. The capacity development of SMEs in Nigeria requires good access to finance, adequate infrastructure, entrepreneurial training, clearly defined tax policies and the adoption of modern technology. Otherwise, the SME's efforts for economic development will be jeopardized. Therefore, extant literature shows that authors have evaluated the performance of SMEs from different angles. It has been approached from financial aspect such as the reliance on as the primary goal of all business ventures (Levit, 1973) of which, with profit, the business will likely survive in the long run (Simons, 1999). This is consistent with Pont and Shaw (2003) who included other financial metrics like market share, return on capital and investment) to performance. For instance, market share is a crucial indicator of market competitiveness with reasonable customers that shows how well a firm is doing against its competitors but the measurement metric is supplemented by demand in the market (Servaes & Tamayo, 2014). However, the performance of SMEs and any other firm is not only evaluated from financial metrics. Pont and Shaw (2003) suggested other measures of non financial performance such as employee turnover, service quality and brand loyalty. This is important especially when the capabilities of a business that drives the success is put into context. According to MbaSkool (2020) company capabilities are people, organization, structure, and technology brought together to drive business results. This is significant as it links strategy and requirements to strategic demands. Therefore, the development of an organization focuses on improving capabilities like structure, people rewards, metrics and processes in alignment with strategy. The development of a firm is a critical and scientific-based process that helps SMEs build capabilities for effective change, and the methodology becomes objective-based for system change. Therefore, this study examines government support as opportunities available to SMEs, particularly the impacts of access to funding, tax relief, infrastructure, and modern technology on the performance of SMEs.

LITERATURE REVIEW

The SMEs promote responsible use of resources and safeguard the ecosystem for future generations through environmental protection. The SMEs create sustainable economic development, which strengthens global competitiveness, attracts international investment and fosters economic stability. The context of what SMEs can do is shown in extant literature. Mokuolu and Oluwaleye (2023) suggested that

SMEs play significant role in mitigating unemployment although the impact is insignificant on the short run, Olaniyi and Adekanmbi (2022) asserted that it has meaningful impact on industrial growth on the long run. However, the capacity to meet the burgeoning needs of the population demands enhancement of their capacity and mitigation of the challenges that impact their ability to meet expectations. In this context the government is vested with the responsibility of creating a friendly business environment, workable policies, incentives and programmes and other institutional supports (Desai, 2010; Akawu *et al.*, 2018). In other contexts, innovation is perceived as one of the major keys that is required to drive the market including the SMEs finance market (International Finance Corporation, 2022). The report suggests that MSMEs still dominate economies despite the rising challenges that impact the operations and performance of SME businesses. Further, the assessment of Nigerian context of SMEs on how to drive the success of entrepreneurs, Abuja Enterprise Agency (2023) evaluated the collaborative endeavors that should light up the growth of SMEs. The agency emphasized the role of sensitization programmes, MSME empowerment initiatives, workforce training, improvement of access to finance, deepening partnerships with support institutions like financial institutions, and adoption of social media marketing to grow business potentials. Further PwC (2020) report conducted prior to COVID-19 pandemic revealed that the burning issues among SMEs centre on susceptibility of Nigeria's business environment to activities in the global economy such that it is impacting the business environment and market/economic conditions; tax issues that shows existence of several tax authorities leading to multiple taxations, inadequate implementation of technology in tax payments; limited access to funding as about 48% funds are sourced from family and friends while only 49.%% have access to credits from banks. The sources of finance SMEs usually access are captured on figure 1.

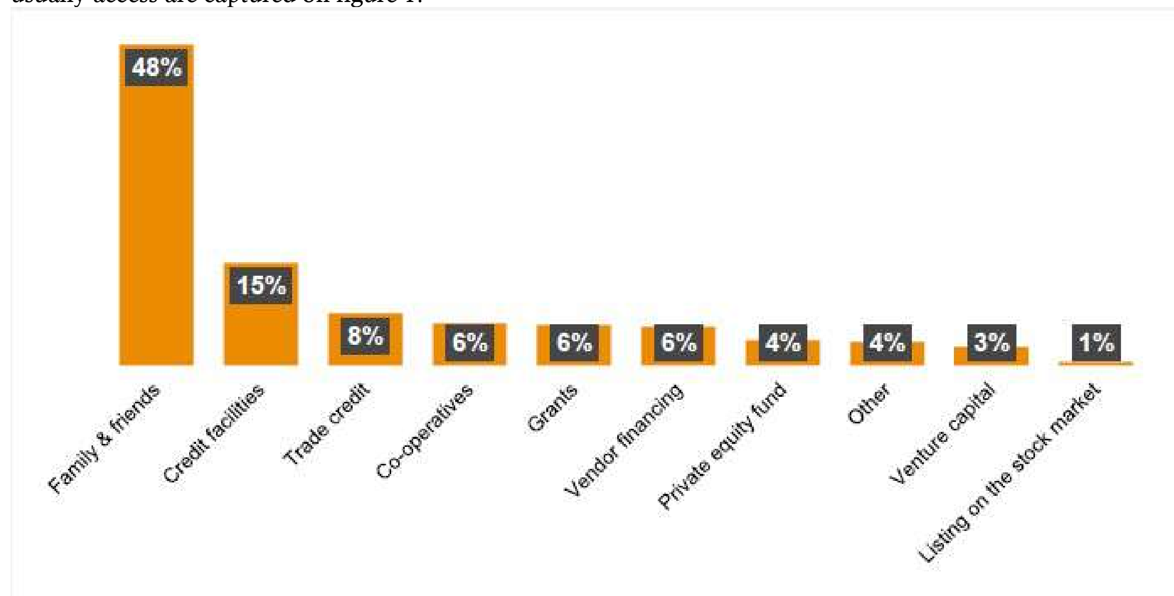

Figure 1: Sources of SME financing
Source: PwC (2020)

Empirical studies such as Eyanuku (2022) suggest that capacity development is essential for SMEs following its impact on the performance of SMEs. However, the studies on SMEs vary widely and have continued to evolve following the significant role it plays. Some studies focus on SMEs' impact on economic and growth development (Mokuolu & Oluwaleye, 2023; Olainyi *et al.*, 2022) others consider impact of government support (Akawu et al., 2018) while some others have looked at the role of celebrities in endorsing SME's handiworks such as footwears (Oteh *et al.*, 2022). The implication is that studies have significantly varied when studying SMEs. However, there are common factors that are key interests of researchers. These are the access to funding (PwC, 2020; Agwu & Emeti, 2014; Adepoju, 2003), socio-economic issues associated with SMEs on performance like unemployment (Ogunjimi, 2021), technological factors (Oyibgo *et al.,* 2023).

Access to Funding: Finance is a key aspect for SMEs. SMEs access is to finance is yet to reach an appreciable level following the 49.5% rate of access to bank credit to which sole proprietors are the greatest majority (PwC, 2020). It is considered a major factor that hinders the operations of SMEs as they pursue

growth and attainment of objectives (World Bank, n.d.). However, financial institutions are considered the key player in mitigating financial challenges of SMEs (Zhu et al., 2019) given that inadequate funding is capable of impacting the performance of SMEs (Opara, 2011) and majority of SMEs source their funds from family and friends and personal savings (PwC, 2020). With regards to banks' sources of capital, the requirement of collateral and other requirements such as inadequacy of proper documentations work against the SMEs in accessing loans from banks (12). However, the following are five funding opportunities for SMEs in Nigeria sponsored by the federal government (Alile, 2021): Loan from the Bank of Industry (BOI), The YES programs by the Lagos State Government, Crowd-fund, GroFin fund, You-Win connect Nigeria project for SMEs among others. Adequate access to funds from the government will grow SMEs to automation and provide succor to them

Modern technology: The ability of Nigerian companies to satisfy and retain customers depends mainly on the development and use of information technology infrastructure (Ihemeje, 2016) and another technology base of production and market offer. In the bid to catch up with global developments and improve the quality of service delivery, SMEs must invest in technology, such as widely accommodated electronics and communication networks, to deliver a wide range of value-added products and services to customers. However, the context of modern technology implies an innovation that is better than existing one. It often offers better performance and yields improved benefit to the old technology. According to Oyigbo et al., (2023) modern technologies are within the context of recent developments in integrated systems, internet, hardware and software that are able to impact business performance better. Reliance on modern technology is often seen with growing businesses (Uduakobong & Okonkwo, 2021) as they use it to improve productivity and profitability, quality of products and service, compete favourably in a competitive business environment, enhance decision making and impact sales of the SMEs (Idris *et al.*, 2022).

Training: Training is to inculcate in the new hire or existing employee the learning, ideas, morals and principles guiding the new assignment or to assign a sense of responsibility in line with organizational activity aimed at bettering the performance of individual and groups in organizational settings (Onyi, 2014). Training is for specific skills; it is both focused upon and evaluated on job-oriented principles that the individuals are currently holding. Training is the most effective means of staff development in organizations. Therefore, the required training should include on-the-job and off-the-job orientation courses, informal and formal courses, coaching, etc.

Tax Relief: The critical challenge in taxation is multiple taxes which according to PwC (2020) are one of the burning issues associated with SMEs challenges. Multiple taxes are situations where businesses and individuals pay taxes to different agencies and layers of government under different guises over the same revenue item. Accordingly, Olatunji (2022) states that multiple taxation can be seen as compulsory payment without legal backing, tax demand by two or more different government agencies, imposing two or more taxes by same-level agencies on the same tax base, and situations where various government agencies impose taxes in the form of fees or charges. Enough government incentives like relief on taxes and levies will help SMEs maximize profits and increase their retained earnings for wealth creation and employment opportunities for youths. Other burning issues on SMEs taxation is inadequate coordination of federal and state tax agencies, limited or lack of integration of technology in tax collection, lack of fully functional tax refunds, unavailability of payment tax schedule that is comprehensive and the harassments of tax collectors (PwC, 2020). SMEs often find it challenging to comply with local government taxes, company income tax, value added tax and pay as you earn (PAYE) (PwC, 2020). The implication is the need for tax relief such as initial tax-free period for SMEs in certain sectors like production. According to PwC (2024) Nigerian government offers tax holidays, rural location incentives, export incentives, export expansion grant scheme, gas utilisation incentives, tourism incentives, interest incentives, investment allowances, road infrastructure development and refurbishment investment tax credit scheme, and foreign tax credit to SMEs in diverse sectors with the intention of encouraging investment in the sectors. However, the impact of 2019 Finance Act on MSMEs is on figure 2 while the key tax considerations for the MSMEs are on figure 3.

Companies Income Tax:

A	B	C	D	E
Exemption for small companies, agriculture companies and lower rates	Tax Losses	Early payment incentive	TIN	Double taxation eliminated on commencement
The Law now sets a minimum threshold for applicability of Companies Income Tax ("CIT"). Companies that have an annual turnover of N25 million are totally exempt from companies income tax while companies that have an annual turnover of N25million-N100million have a reduced tax rate of 20%. Agricultural companies are also tax exempt subject to qualifying conditions Prior to the enactment of the Act, all companies (except agricultural, mining, export or manufacturing businesses with an annual turnover of N1m and below had a rate of 20%) doing business for profit were required to pay tax on their profit without consideration to the value of their turnover.	In 2007, CITA was amended to delete the previous 4 year restriction of losses. However, some wordings were not deleted which did not allow the carry forward of tax losses beyond the fourth year of commencement of business. The Federal Inland Revenue Service ("FIRS") did not enforce this provision in practice but it created some uncertainty for new investors. The Law is now clear on the restriction of carry forward of tax losses such that tax losses can be carried forward indefinitely. This is especially useful as startups who incur significant losses in the first few years of business can now carry forward tax losses against future taxable profits.	There is an incentive for companies that pay CIT on or before 90 days from the due date for filing. Such companies will be entitled to a bonus credit of 1% (for large companies with turnover greater than N100m) or 2% (for medium-sized companies with turnover between N25m and N100m). The higher threshold for medium sized companies acknowledges that SMEs face challenges when seeking faced by SMEs	The Law mandates banks to ask for Tax Identification Number (TIN) before opening business bank accounts, while existing account holders must provide their TIN to continue operating their accounts. This is important to capture as it will capture more small businesses into the tax net.	Before the enactment of the Finance Law, companies just commencing business were expected to prepare companies income tax for the first three years using the 'commencement rules'. Commencement rules subject the profit for a period of at least 12 months within that period to double taxation. The rules have now been modified to eliminate overlaps and gaps that created double taxation and complication during commencement.

Figure 2. Impact of Finance Act (2019) on MSMEs in Nigeria
Source: PwC MSME Report 2020

Embrace tax technology	Exemptions and restructuring	Deductible tax costs	Avoid penalties	Stay informed
SMEs and companies should leverage technologies to compute their tax and prepare their returns online. This would help simplify tax processes and prevent extra costs of late documentation and payment. Some state tax authorities now have digital platforms for filing taxes. Choose these over negotiations with unscrupulous tax officials who do not represent the intent of the government,	Companies totally exempt from Companies Income Tax (CIT) could divert funds to strengthen their technology base and invest in research and development. Companies not entitled to CIT exemptions may choose to leverage exemptions from research and development. They can also disintegrate substantially different businesses where it is commercial to do so.	The free carry forward of tax losses against future taxable profits is especially beneficial for startups who made substantial losses in the first few years of business. They may also request tax deduction for bad debts if possible. VAT registration is not mandatory for SMEs but there could still be irrecoverable VAT costs from procurement that hit your margins so voluntary registration may be considered. For the most part the VAT law will still need amendment to expand recoverable VAT especially now that the VAT rate has increased and to ensure Nigeria's VAT laws compare to other countries with higher rates. Ultimately, do not lose sight of VAT recoveries. Documentation is key to support tax deductions.	MSMEs should pay attention to the increase in penalties of failure or late VAT registration as this may pose a threat to their profit where their returns are not filed on time. However, they may leverage extended payment period during the COVID-19 pandemic.	There is a new wave of energy from the legislators and tax authorities to review the tax laws and increase revenues. Staying informed is critical. Take advantage of free seminars and fee paying business sessions that address business growth and provide updates on tax laws. The information gained can save you tax costs that could reduce margins and hamper growth.

Figure 3: Key tax considerations for SMEs from Finance Act (2020) post COVID-19 pandemic
Source: PwC MSME Report 2020

Infrastructure: Infrastructural development stands for those public facilities and incentives that are supplied to the public to improve the quality of life (Inyiama et al., 2017) as cited by (Musa et al., 2021). Some notable infrastructures include good roads, regular electricity supply, transportation, technology development, piped-borne water, education, and hospitals. Infrastructure investment is an essential driving force to achieve rapid and sustained economic growth. According to Agwu and Emeti (2014) and Ajayi and Jegede (2014) it is one of the significant challenges confronting SMEs.

Performance: Performance is considered by Wheelen and Hunger (2002) as the end results emanating from activity. In business terms, it deals with the results that are consequences of business activities such that the performance can be good or bad. It is an aftermath of individual, social and organisational performance such that they are grouped as financial or non-financial performance (Kim, 2009). Originally, it is perceived from financial metrics dimension such as profitability and market share. Thus, performance can be measured from financial terms or as operational efficiency (Nguyen et al., 2021). However, Pont and Shaw (2003) provided a comprehensive understanding that helps the understanding of the metrics of measuring performance. According to the authors, performance can be in financial metrics such as gross operating profit, return on capital and return on sales. It can also be in non financial metrics such as customer loyalty, satisfaction and employee turnover. Notably, the performance was approached from the profitability, market share, youth employment, lower cost of production, and sales turnover.

The Abia State Model for SMEs

In an effort to tackle the problems and challenges of SMEs in Abia State, the government has resulted in a deliberate, painstaking roadmap and diligent pursuit of visible impact-yielding measures in SME developments in financing, infrastructure, training and modern technology assistance. These positive impacts guide the path of the Abia State model for the sustainable development of SMEs in Abia State. The Abia State government has tried to rebrand and reposition Abia State as an undisputed SME centre of excellence in Nigeria. This drive is propelled by the "Made in Aba" and "Abia to World Campaigns" aimed at enhancing small-scale business opportunities and partnerships between Nigeria, Africa, Australia, China and other foreign countries (Premium Times, 2023). The Abia State Government empowered some youths with cash as loans that seem insufficient to sustain businesses, no tax reduction as rebates for Abia State SMEs, and what is obtained as taxes are questionable, resulting in multiple taxation. The state government built some roads, and among the urban beneficiaries is the Ariaria International Market, which has drainage and culverts. Also, government-sponsored 30 youths to understudy automated shoe-making in China to boost footwear and garment products**.** Finally, the establishment of Enyimba Automated Shoe Company in Aba has improved the shoe-making productivity in Abia State. So, some SMEs in Abia State are now brick-and-click businesses, making use of social media tools to market their products.

Theoretical Support

Extant literature shows that there are multiplicities of theories used by researchers to underpin their studies while some others such as Gumel and Bardai (2021) did not underpin their study on any theory. Other studies such as Obot et al (2023) underpinned their study on information asymmetry theory, imperfect information theory, and theory of change. Mokuolu and Oluwaleye (2023) underpinned their study on supply leading hypothesis, financial repression hypothesis, and endogenous growth theory. Olaniyi and Adekanmbi (2022) supported their study with Keynesian economic theory, proportionate growth theory, and need achievement theory. Akawu *et al.,* (2018) anchored their study on two theories that include contingency theory and economic theory of entrepreneurship. Eyanuku (2022) underpinned the study of SMEs capacity development and entrepreneurship on performance and human capital development theory, and dynamic capabilities and capacity building theory. However, the study is underpinned on dynamic capabilities and capacity building theory. The implication of the theory is that SMEs ability to solve problems in dependent on their dynamic capabilities which is made up of managerial and organizational processes, and formed by other dynamic capabilities leading to multi-dimensional construct, useful in decision making and has the ability of modifying other dynamic capabilities (Li & Liu, 2014). According to Barreto (2010) the theory focuses on the constructs of propensities that include changes to resource base, opportunity and threat detection, timely decision making, and capability monitoring. The theory calls for the adequate resource management against competition within and external to the industry (Eyanuku, 2022). It is connected to training or learning by doing methodology (Ringim et al., 2014), improvement of organization through training and education (Murphy & Hill, 2015). In the context of the study, the training, taxation, technology, infrastructure, finance are within the propensities captured by the dimensional constructs of Barreto (2010). Madeiros et al., (2020) studied the dimensional constructs and articulated it in constructs that involved sense-making, implementation of change, and competitive advantage with sense making having sub-constructs of environmental monitoring, identification of opportunities, assessment of the resource base-asset position, market modification of resource base, and market orientation.

METHODOLOGY

This study is an exploratory study that incorporates a quantitative approach. The sampling technique adopted was the judgmental method and targeted 30 youths in the Abia State government trained in China as shoe-making entrepreneurs. Data was sourced using questionnaires administered to the target samples. Analytically, the study employed multiple regression models. This design was adopted because the respondents are homogenous, being SME operators within the same environmental coverage.

To ensure consistency, the study checks for the reliability of the instrument, and the result is presented in Table 1

Table 1: Reliability of instrument statistics.

Cronbach's alpha	Cronbach's Alpha Based on the study item	No of items
0.749	0.809	2

Source: Field Survey, 2023

The questionnaire was tested for reliability and internal consistency in each of the constructs of the proposed model to ensure that it would yield the same result when applied to the same situation at different times. A Cronbach's Alpha result showing 0.70 and above ensures internal consistent checks are proven reliable (Anyanwu, 2016; George & Mallery, 2003).

Model Specification

As a multivariate analysis, the model specification for this study will be adopted thus:

SMEs = f (FIN, MTL, INF, TR, MTEC) 3.1

SMEs = $\beta_0 + \boldsymbol{Fin_1}\beta_1, + Mtl_2\beta_2, +_, Inf_3\beta_3 + Tr_4\beta_{4,} + Mtec_5\,\beta_5 + U_t$ . . . 3.2

Where;

SMEs = (SMEs Opportunities and capacity development), FIN = (Access to Finance for profitability), MTL = (Multiple taxes and levies relief for market share), INF = (Infrastructure for employment of youths), TR = (Training to improve production costs), MTEC = (Modern Technology to improve sales turnover), β_0 = (Intercept), β_1–β_5 = (Coefficients of the independent variables) and U_t= (Error term).

Decision Rule

Reject the null hypothesis (Ho) if the value of F-stat is found to be large or very large and F-stat prob. value (0.005). Otherwise, accept the alternative hypothesis (H_1). The relationship established will be deemed significant when the Probability (P) value obtained in the regression analysis in each case is less than 5% of significance **(P-value < 0.05).**

RESULTS AND DISCUSSIONS

Demographic Profile:

Gender: All the respondents were male.

Table 2: Distribution of respondents by age (years)

Age	20 – 30	31 – 40	41 – 50	Above 50
No.	6 (23%)	7 (27%)	10 (38%)	5 (12%)

The table above shows that the majority of SMEs are youths, maintaining 38% of the population.

The respondents reveal that the majority of the SMEs have primary education, with emphasis that the sales turnover of the SMEs increased from year to year, especially after the China training, with 58% of the SMEs recording between N10m and above in 2021–2022 financial year. Also, evidence shows that the majority of respondents, about 55%, has good experience and is skilful.

Establishing new outlets reveals that the SMEs continued to increase their branches after the China training. This shows great improvements in 2022. Evidence shows that the number of youths employed by SMEs increased in the year 2021 – 2022 in the category of 5 employees, meaning that SMEs continued to develop more people after the China training

Table 3: Questionnaire distribution of respondents

No Distributed	No Returned	Percentage returned
30	26	87%

The questionnaire was distributed randomly amongst the 30 trained SMEs. 26 out of the sampled questionnaire responded to. This gives 87% of responses, and it is duly commendable.

RESULTS

Table 4: Correlation matrix

	Finance	Tax relief	Infrastructure	Training	Technology
Finance	1.000				
Tax relied	-0.094	1.000			
Infrastructure	- 0.085	0.646	1.000		
Training	0.382	0.382	0.050	1.000	
Technology	-0.376	0.653	0.042	-0.178	1.000

Table 9 shows that the independent variables were normally distributed at a 95% level of confidence within two standard deviations (2-tailed) of the mean at 5% (0.05 level of significance). The implication is that the data were reliable and fit for conducting regression analysis.

Table 5: Correlation result of the models

		Amount involved	Actual loss
CAPADEV	Pearson correlation	1	0.965**
	Sig. (2-tailed)		.000
	N	26	26
SMEs	Pearson correlation	0.965**	1
	Sig. (2-tailed)	.000	
	N	26	26

** Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis between capacity development (CAPADEV) and SMEs was very strong at 97%. This explains that the independent variables investigated are significant drivers of SME businesses.

TEST OF HYPOTHESES:

Hypothesis 1:

Table 6: Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1.	.865	.749	.729	.26058

a. Predictors: (Constant), finance

The correlation result in Table 11 shows that Multiple R = 0.865, indicating a strong correlation between SMEs and finance, leaving 13% explained by other variables. The R^2 = 0.749 and R^2 adjusted = 0.729, meaning that the model has the goodness of fit at a 5% significant level and predicts well.

Table 7: Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.216	1	22.216	327.177	.000
	Residual	1.630	24	.068		
	Total	23.846	25			

a. Dependent Variable: profitability

b. Predictors: (Constant), finance

The variation that exists in Table 12 between SMEs and finance shows that the ratio of the regression and residual value means (Fstat = 327.177) is very large at a significance level of <0.005 at (Prob. 0.000). This means that the estimated regression model is well specified. So, with Fstat = 327.177 at an observed significance level of less than 0.0005, the null hypothesis is rejected.

Table 8: Regression Analysis

Model		Unstandardised coefficients		Standardised Coefficients	t	Sig.
		β	Std. Error	β		
1	(Constant)	.310	.206		1.503	.146
		6.292	.348	.965	18.088	.000

a. Dependent Variable: profitability

Table 8 states that finance has a positive coefficient (6.292), showing that the predicted value of SMEs will increase when finance increases in the same proportion. SMEs = 0.310 +6.292 Fin + ε.

Hypothesis 2

The correlation result shows that Multiple R = 0.535 indicates a strong correlation between SMEs and multiple tax/levies, leaving 46% explained by other variables. The R^2 = 0.286 and R^2 adjusted = 0.257, meaning that the model has the goodness of fit at a 5% significant level and predicts well. The relationship is good, though it has a goodness of fit, but it may be a minor driver in this industry sector.

The ANOVA shows the variation that exists between SMEs and multiple tax/levies, indicating that the ratio of the regression and residual value means (Fstat = 9.636) is large at a significance level of <0.005 at (Prob. 0.105). This means that the estimated regression model is well-specified. So, with Fstat = 9.636 at an observed significance level of less than 0.005, the null hypothesis is rejected.

The regression analysis here shows that multiple taxes/levies have a negative coefficient of -0.308, indicating that the predicted value for CAPADEV decreases for every eventual one-unit increase in the value of multiple taxes/levies. SMEs = 2.66 + 0.308Multi + ε.

Hypothesis 3

The correlation indicates that Multiple R = 0.534, indicating a strong correlation between SMEs and infrastructure, leaving 47% explained by other variables. The R^2 = 0.285 and R^2 adjusted = 0.266, meaning that the model has the goodness of fit at a 5% significant level and predicts well.

The ANOVA shows the variation that exists between SMEs and infrastructure reveals that the ratio of the regression and residual value mean (Fstat = 3.302) is large and greater than <0.005 at (Prob. 0.000). This reveals that the estimated regression model is well specified. So, with Fstat = 3.302 at an observed significance level of less than 0.0005, the null hypothesis is rejected. Infrastructure is a good driver for small- and medium-sized businesses.

The regression analysis of the coefficient of determination shows that infrastructure has a positive coefficient of 0.960, revealing that the value of SMEs will increase by 0.960 for every additional one-unit increase of infrastructure in SME businesses. SMEs = 2.552 + 0.960Inf + ε.

Hypothesis 4

The multiple regression model shows Multiple R = 0.274, indicating a very weak relationship between SMEs and training, leaving 73% explained by some SMEs who must have gotten skills and training from apprenticeship or mentoring before coming to operate businesses. The R^2 = 0.075 and R^2 adjusted = 0.037, meaning that the model has the goodness of fit at a 5% significant level and predicts well.

The ANOVA in this section shows the variation that exists between SMEs and training and reveals that the ratio of the regression and residual value mean (Fstat = 1.950) is large and greater than Prob. value (Prob. 0.175). The null hypothesis is rejected. Adequate training is good and enhances productivity and reduces costs. SMEs need retraining from time to time.

The regression analysis shows that training has a positive coefficient (0.324) at prob. (0.175) and is positively related to SME business. So, for every 0.324 unit increase in training, the capacity of SMEs will increase equally at the same proportion. SMEs = 2.242 + 0.324train + ε.

Hypothesis 5

The correlation result explains that Multiple R = 0.477, indicating a weak correlation between SMEs and technology, leaving 52% explained by other factors. The R^2 = 0.227 and R^2 adjusted = 0.195 means that the model has the goodness of fit at a 50% level of significance and predicts well. Modern technology is new and expensive to most SMEs in Nigeria, and the adoption rate still needs to be higher.

The ANOVA expatiates the variation that exists between SMEs and technology, revealing that the ratio of the regression and residual value mean (Fstat = 7.055) is large and greater than Prob (0.014). Therefore, the null hypothesis is rejected. Modern technology is essential and highly significant in today's SME businesses.

The regression analysis of the coefficient of determination indicates that modern technology has a positive coefficient of 0.267 and is positively related to SMEs. So, for every 0.267 unit increase in technology advancement, the capacity of SMEs will also increase at the same rate.

SMEs = 0.300 + 0.267tech + ε.

Discussions

The inputs in this research are to comprehend the relevance of SMEs in national economic growth and the primary drivers. The demographic profile explains that the majority of SMEs is males of young ages and has basic education.

The results of the hypotheses tests are presented thus: Hypothesis 1 (H_1 = 6.292), Finance has a positive coefficient, and it is related to SME operations. So, the more SMEs have access to finance, the more profits they make. The various governments should grant financial assistance to SMEs as development funds; this is supported by Alile (2021), who advised that there should be reduced bottlenecks in SMEs' access to credit facilities from banks.

Hypothesis 2 (H_2 = 0.308): Multiple taxes and levies have a negative coefficient, meaning a negative relationship with SMEs in the shoe-making business. This does not mean that this variable is insignificant to other SMEs. Multiple taxation increases costs and reduces the profits of SMEs. Although the consumer pays the final price, taxation is significant in SME businesses to remain competitive (Olatunji, 2022) and increase market share.

Hypothesis 3 (H_3 = 0.960): Infrastructure has a positive coefficient, and it is positively related to SME business. Infrastructural developments are vital to SMEs' growth and support for a stronger economy (Robul, 2020), accelerated market penetration and resistance to obstacles that may hinder profitability, firm growth and employment of youths.

Hypothesis 4 (H4 = 0.324): Training has a positive coefficient and is positively associated with SME businesses. Taiminen (2015) averred that proper training and retraining of SMEs enhances the identification of critical factors by SMEs as metrics for negotiation, employment, costing and other processes that could give support to competitive marketing strategies in reaching customers and reducing costs in product quality and production.

Hypothesis 5 (H5 = 0.267): Modern technology has a positive coefficient, and it is positively related to SME businesses. Modern technology aids business strategies in giving access to goods and services through developed platforms. Supporting the influence of modern technology in SME business, Somjai (2020) posits that despite the perceived barriers to implementation and adoption, technology transformation inspires managers, encourages employees, creates a positive impact on sales, and reduces marketing costs for improved sales turnover.

CONCLUSION AND RECOMMENDATIONS

Small and medium businesses have been considered major drivers of economic growth in nations like Nigeria; SMEs are faced with significant challenges, which they overcome while pursuing opportunities. These opportunities include attracting near customers and developing youths for employment. The major influencers of small and medium businesses identified and tested proved significant to the study. For the sustainability of the capacity development of SMEs, the investigated factors were found capable of driving the SMEs successfully but need to be adequately implemented by the government. The adoption of modern technology in the shoe-making business in Nigeria will explore motivation, reduce the importation of footwear, and create jobs, employment and security if the government can utilize the insight provided by this study. It is recommended that the governments should apply change management in policy schemes to grow SMEs for sustainable economic growth in Nigeria. Hinging on the discoveries extracted from this study, the following recommendations are made thus:

1. That the SMEs should have encouraging access to financial facilities from government. It is very poor to have a record of 4% access to finance by SMEs in Nigeria.
2. The governments in Nigeria should eradicate multiple taxation for SMEs. However, reduced taxes will encourage SMEs to reduce production cost.
3. Infrastructural inadequacy should be discouraged in Nigeria. Adequate roads, rails and electricity infrastructure should be provided for SMEs.
4. As demonstrated by Abia State government by sending 30 SMEs operators for overseas training. This noble initiative should be repeated and emulated by other governments.
5. The world has been connected digitally so advanced modern technology should be encouraged by governments in policy making and implementation by both SMEs and government.

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EFFECT OF STRATEGIC MANAGEMENT IMPLEMENTATION ON THE EFFECTIVENESS OF SELECTED MANUFACTURING COMPANIES IN THE SOUTH EAST, NIGERIA

[1]Chukwu Bonaventure, [2]Nwokoro, N. A. and [2]Udor-orji, Chidinma
[1]Michael Okpara University of Agriculture, Umudike, Abia State
[2]K. O. Mbadiwe University Ogboko, Ideato South, Imo State
Corresponding author: chukwubonaventure06@gmail.com

ABSTRACT
This study examined the effect of strategic management practices on selected manufacturing firms in South East, Nigeria. The specific objective was to examine the effect of strategy implementation and business expansion on the effectiveness of selected manufacturing firmsin South East, Nigeria. Consequently, the design utilized in this study was survey research design. The study made use of primary and secondary sources of data to gather information from the respondents. The target population of the study was 1772 consisting of the staff of all the manufacturing firms operating in the South East Nigeria. The sample size of three hundred and twenty-six (326) was derived using Taro Yamane formula. A total of 326 copies of the questionnaire was distributed to the respondents, 60 questionnaire was wrongly filled with percentage ratio of 18.5% while 266 questionnaire were correctly filled with percentage ratio of 81.5%, hence, this forms the variables for analysis in the study. The study's findings indicated that Strategy implementation and business expansion have a significant effect on effectiveness of selected manufacturing firms in South East, Nigeria. (R^2 was 0.934 and the coefficient of Strategy implementation and business expansion was statistically significant and positively related to organizational effectiveness at 1 percent level 0.382*** or 38.2%). The study concluded that all strategic management components were important and positive drivers of company performance among the selected manufacturing firms in South East Nigeria. As a result, the study recommend that Leadership of the firms should build their capacities around organizational structure and performance effectiveness so as to operate at a high standard both in production and distribution; they should improve on employees' quality service delivery, formulation of strategies and programmes on the concept of responsiveness.
Keywords: Strategic Management, Effectiveness, Manufacturing Firms

INTRODUCTION
Business enterprises play a significant role in societies and represent a key ingredient of economic growth and development of developing nations. However, to fulfill the above role, every business organization irrespective of its size must maintain a high level of productivity and efficient service delivery. As has been asserted by Johnson, (2018), the capacity of an organization to achieve as well as maintain high productivity and performance is a fundamental challenge encountered by management of virtually all corporations today. Notably, strategic management implementation practices have been identified as an imperative for competition and enhanced performance as it improves efficiency in respect of production and allocation of goods and services in the organization. In financial sector, strategic management practices and competition has implications to access to financial resources, allocation of funds, competitiveness and development of service and manufacturing industries, levels of economic growth and the degree of financial stability. Competition can be a basis for stimulating innovation, lowering prices and increasing the quality of products and services produced, which consequently enhances customers‟ choice and welfare.

Strategic management implementation according to Tawse *et al.* (2019) has four key characteristics. It is directed towards overall organizational objectives; it involves multiple stakeholders in decision making, it necessitates the consideration of both short and long term view points; as well as recognition of exchange between effectiveness and efficiency. This motion describes a firm as a system in which economic resources are successfully used and the company's functional operation are organized around profit generation. Not only do profit and non-profit organizations gain from strategic management implementation. Strategic management implementation can have a fundamental effect on non-profit organizations (NGOs) beyond the potential funding benefits (Bellamy, Amoo, Moroyn,andMuniford, 2019). Strategic management implementation can help NGOs build and enhance relationships with key stakeholders such as donors and partners and establish collaborations with external organizations (Adeleke *et al.*, 2018).

Strategic management implementation may be viewed as a collection of decisions and actions that results in the formulation and implementation of plans designed to achieve the objectives of a firm (Pearce & Robinson, 2017). Therefore, strategic management implementation practices encompass a set of organizational activities that results in strategic intent, formulation of plans, execution and control of the performance in a business enterprise. Thompson and Strickland (2017) asserted that the managerial work of formulating a strategy and presiding over its execution has five distinguishable tasks. These tasks include formulating a concept of the business and a vision of where the desired future state of the organization, translating the mission into distinct long-range and short-range performance objectives, crafting a strategy that matches organization's situation and that has potential to produce the targeted performance, implementing the chosen strategy efficiently and effectively, evaluating performance and initiating corrective measures. It has been observed that organizations, whether for profit or non-profit, private or public must engage in strategic implementation practices to aid in realisation of their corporate goals (Kithinji, 2012).

The business environment in which organizations operate is dynamic and turbulent with constant and face pace changes that render yester-years irrelevant (Ofunya, 2003). According to Koech, and Were, (2018) the hypercompetitive business environment has pushed organizations to limit dictating the need to adopt strategic management practices that support plans, choices and decisions that will lead to competitive advantage and achieve profitability, success and wealth creation. Strategic management addresses the question of why some organizations succeed, others fail (Koech, and Were, 2016), and it covers the causes for organization's success or failure (Porter 2001). This study aimed at investigating the effect of strategy implementation and business expansion on the effectiveness of selected manufacturing firms in South East, Nigeria; Strategy implementation and business expansion do not have significant effect onthe effectiveness of selected manufacturing firms in South East.

LITERATURE REVIEW

Strategy is the determination of the basic long term goals and objectives of an enterprises, and the adoption of action and the allocation of resources to achieve these goals (Chandler, 1962). Strategy provides the directional cues to the organization that permit it to achieve its objectives while responding to the opportunities and threats in its environments (Schendel and Hofer, 1979). Strategy is a search for direction, which energizes the life of an organization (Stance & Dunphy, 1994). Mintzberz (2015) strategy is a pattern, a ploy, a position, a perspective and a plan. Strategy are large scale plans for interacting with the environment inorder to achieve long term goals (Bartol and Marton, 1991)

Formulation of Strategy: Understanding the firm culture of mission, vision, setting attainable goals and objectives, designing strategies and establishing policy guidelines are all part of the strategy development process, and choosing the best option (Whelleng & Hanger, 2018). In their view, strategy formulation process is usually done at three levels: Corporate, Business and Functional levels.

The corporate level according to Whelleng and Hanger is a top management conern to craft mission, vision and goals of an organization. The business level strategy seeks to identify the firm's product lines, and operational areas, while the functional level seeks to identify the management functions such as production, marketing, personnel, finance, and accounting, including Information and Communication Technology (ICT).

There are many theories which explains the driving forces of strategic management and organizational effectiveness. This study discusses the following theories viz stakeholders' theory, theory of business, resource-based theory and leadership theory. What is stakeholder theory? Stakeholder theory holds that company leaders must understand and account for all of their company's stakeholders the constituencies that impact its operations and are impacted by its operations. Stakeholders include employees, shareholders, customers, suppliers, creditors, the government, and society at large. Most stakeholders do not hold stock or shares in a company. Rather, they are invested in a different way.

Dwolabi (2012) defines stakeholders as any group or individual who can affect or is affected by the achievement of an organization. The founder Richard Freeman opines that if organization's want to be effective. They will pay attention to all and only those relationship that can effect or be affected by the achievement of the organization's purpose. Therefore, the management of stakeholders is fundamentally a pragmatic concept. Regardless of the context or the purpose of the firm, the effective firm will manage the relationship that are important.

Empirical Reviews

Osman (2022) investigated the effect of strategic management implementation practices on effectiveness of Kenya Commercial Bank in Nairobi City County. The researcher made use of descriptive research design

to implement the research strategy. The target population of the study consisted of employees of Kenya Commercial Bank whereas data was collected from a sample of employees at the management level selected using stratified random sampling. Both primary and secondary data was collected using a questionnaire and document review respectively.

Ekon and Bemnet, (2022) investigated the relationship between strategic management implementation practices and the performances of SMEs in Nigeria using a quantitative research approach. Specifically, the study adopted a descriptive survey research method where questionnaire was used to collect data from 150 SMEs in 30 randomly selected enumeration areas in Lagos state Nigeria. The study specifically revealed that strategic management practices like scanning the environment from opportunities, strategy formulation, strategy implementation, and competitive advantages of the SMEs in Nigeria in the global scene. As such, the study concludes that for the benefits of strategic management practices to be reflected in the SMEs performances in Nigeria, firms must be able to implement and evaluate strategy formulated.

Nkemchor and Ezeanolue (2021) in a study, investigated the influence of strategic management implementation on organizational effectiveness of Delta State, Nigeria with particular reference to selected higher institutions in Delta state, Nigeria. The experiment identifies lack of clear definition of environmental scanning, strategy formulation, strategy implementation and strategy evaluation as the major problem of organizations in the globalization era. The study's main goal is to see how environmental scanning, formulation of strategy, implementation of strategy, and evaluation of strategy affect the performance organizations. This study used a descriptive research survey. The populace of the experiment was 1480 selected employees of the tertiary institutions to ascertain the effect of strategic management on organizational performance on tertiary institutions in Delta state, Nigeria, The sample used for the experiment consists of 343 workers. To analyze the data, descriptive statistics and multiple regression analysis were used.

Okwemba and Njuguna (2021) examined the effect of strategy evaluation on performance of chemelil sugar company in Kisumu County, Kenya. The descriptive research design was deemed the most appropriate research design to be utilized in the study. There were 60 department heads, section heads, superintendents, and foremen in attendance. The research includes a census. The study discovered that strategy appraisal and performance have a substantial positive link ($r = 0.867$, $p = 0.014$). The coefficient of determination was determined to be 35.5 percent, meaning that strategy review may account for 35.5 percent of performance changes while other factors account for the 64.5 percent. The regression results established that strategy evaluation is positively and significantly related with performance (ß= .587, t = 1 .943, p - .048). The researchers discovered that increasing strategy evaluation by one unit while keeping all other factors fixed improves performance by 0.587 units. Furthermore, strategy evaluation was proven to improve organizational direction formation by confirming corporate vision compliance and streamlining activities to particular objectives or targets. Furthermore, by allowing employees to follow their progress, strategy evaluation can assist to inspire and drive them. According to the study, having plans that are completely linked to the organization's overarching strategic direction would be imperative for improved effectiveness.

Muendo and Ogutu (2020) evaluated the organization's strategy and effectiveness. This study used a case study research method. The investigation included all the methods of data collection, which includes both primary and secondary data collection method. A desk analysis of strategic plan implementation and financial reports provided secondary data. Because the data was qualitative, the content analysis technique was used to evaluate it. Strategic implementation has a direct impact on organizational performance, according to KMTC's empirical data and analyses. According to the research, KNITC's strategy execution and organizational effectiveness need drawing on national context and global objectives and priorities to design and assure strategy alignment and relevance. According to the document, KMTC should establish a distinct operational office for strategic planning operations. To improve effectiveness, the organization should launch and correctly disseminate the strategic plan at various levels; it should also encourage participation planning and implementation of project activities within the enterprise. Furthermore, the company must devote sufficient resources to achieving the several key result areas outlined in the strategic plan and so realizing the stated goals.

Alhaheri *et al.* (2020) assessed the influence of strategy formulation (vision, mission, and goals) on the organizational operations. The main goal of this study is to investigate the impact of strategy creation on learning and growth in the UAE's public sector. To achieve a respectable study, the current study used a quantitative research approach. As a result, a questionnaire was created and utilized to gather responses on the effects of strategy creation on the performance of the UAE public sector. The statistical package for social sciences (SPSS) and PLS (partial least squares) sem-vb were used to evaluate 403 usable replies to

evaluate the study model (structural equation modelling-variance based). To obtain the required quantitative data, a non-probability sampling technique was used. The data show that strategy implementation (strategy, structure, and human resources) has a significant and beneficial impact on organizational performance, accounting for 19.3 percent of the variance. The findings will be beneficial to the UAE government, especially the judicial agencies in Abu Dhabi.

Onyekwelu (2020) investigated the effect of strategic management implementation on organizational performance with particular reference to some manufacturing firms in South-East Nigeria. The study is anchored on classical theory and resource-based theory. The population of the study is comprised of 1200 employees while the sample size consisted of 300 employees of the selected manufacturing firms through the use of Taro Yamane's formula. Multiple regression analysis was employed to analyze the data generated. It was discovered that all the strategic processes including strategy objective, strategy formulation, Strategy implementations and Strategy evaluation had significant effects on organizational performance of manufacturing firms in South East, Nigeria. The study therefore concluded that strategic management implementation has significant effect on organizational effectiveness in South East, Nigeria. Hence, it was recommended that strategic objective should be in line with the objective of the organization in order to achieve organizational objective and effective employee performance. Also, that organization should seek more input from the lower level managers and supervisors when formulating strategy so that the formulated plans will be effective and in line with both long and short term objectives of the organization.

Kimani (2018) assessed the impact of strategic management implementation strategies on African Fintech enterprises' organizational effectiveness: A case study of Replicating Corporation. The study's specific goals were to see how strategy formulation, implementation, and evaluation affected Replicating Corporation's overall effectiveness. Replicating Corporation's strategic management team was the focus of the study, which used a descriptive correlational research design. The study had 49 participants from a total population of 53. The researcher used Google Forms to administer the questionnaire, which was the primary method of data collection. Its data was analyzed in two ways: descriptive statistical and inferentially. Tables, graphs, and pie charts were used to show the analysis' findings in a descriptive manner. The results of the 1st goal revealed that strategy development had a R^2 co-efficient of 0.278. For the 2nd goal, the influence of implementation of strategy on the effectiveness of organization was estimated to have a R^2 coefficient of 0.235. Based on the final goal analysis, the R^2 coefficient for the effect of strategy evaluation on organizational effectiveness was estimated. A total of 76 managers were chosen as a sample. Questionnaires were used to collect primary data. In the early stages of data analysis, descriptive statistics were used. To create a prediction equation and test its combined and individual relevance, inferential statistics were applied. Senior management made decisions in conjunction with employees and divided authority and responsibility, according to the findings. The organization had a stated mission to fulfill its objectives, as well as a focus on what was genuinely important to the stakeholders, in terms of purpose and vision. According to company resources, the company is a learning organization with a well-understood culture, based on values.

METHODOLOGY

The researcher adopted survey research design. The design is appropriate for this study because the study aimed at collecting information from respondents on their opinions about the effect of strategic management implementation practices on effectiveness of manufacturing companies in Nigeria. This design is suitable for this study because the study is on social science, where opinion of people are important in research.

This study employed primary data. The primary data adopted was through the use of questionnaires carried out in the selected manufacturing companies operating in the South East region of Nigeria. However, the primary data for this study were collected through the use of questionnaire with employees of the selected manufacturing firms operating in the South East region of Nigeria.

The population of this study comprised all the staff and management of the selected manufacturing firms in South East, Nigeria. The selected manufacturing firms are: Paterson Zochonis (PZ), Guiness Plc Enugu, ALO Aluminium Aba, Bricks Production Ehime Mbano, Innoson Group Nnewi Anambra State, and Hero Brewery Onitsha. The figure of staff strength are shown below;

Therefore, the population of this study will be one thousand, seven hundred and seventy-two (1172) obtained from the six (6) selected manufacturing firms in South Eastern zone, Nigeria.

Taro Yamane formula was used to determine the sample size which formula was given as:

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n = Sample
N = Population
e = Error of tolerance (at 95% confidence level)
I = Statistical constant

$$n = \frac{1772}{1+1772(0.05)^2}$$

$$n = \frac{1772}{1 + 1772(0.0025)}$$

$$n = \frac{1772}{1 + 4.43}$$

$$n = \frac{1772}{5.43}$$

$n = 326.34$

Thus, the total sample size of selected manufacturing firms in South East zone, Nigeria was three hundred and twenty-six (326).

A stratified sampling method was adopted to give every member of the staff' equal chance of being selected and therefore made the sample a representing one. Hence, the Bowley's proportional allocation formula was used to determine the relative proportions contributed by various categories of respondent from the six (6) selected manufacturing firmsto the sample size of the study. The formula given as;

$$RPC = \frac{nNh}{N}$$

Where:

RPC = The relative proportions contributed by each category
Nh = The number of staff in each stratum
N = The actual or total population
n = The total sample size

$\text{PZ} = \frac{438 \, x \, 326}{1772} = 80.58$

$\text{ALO} = \frac{347 \, x \, 326}{1772} = 63.8$

$\text{Nigerian brewery} = \frac{316 \, x \, 326}{1772} = 58.13$

$\text{Bricks} = \frac{130 \, x \, 326}{1772} = 23.91$ or 24

$\text{Innoson} = \frac{220 \, x \, 326}{1772} = 40.47$

$\text{Hero} = \frac{321 \, x \, 326}{1772} = 59.05$

For the purpose of this study, the researcher used questionnaire and observation as the instrument for data collection. The questionnaire comprised of two (2) sections A and B. Section "A"contained items in relation to bio data of the respondents while section "B" will contained questions intended to answer the research questions and the study hypotheses. The questionnaire was designed in a Five (5) point Likert scale structure which consisted of closed-ended questions that would be easier for the respondents to answer because of the fixed presentation of questions and responses. Each item required the respondent to indicate the frequency of his or her various opinions under Strongly Agree (SA) =5, Agree (A) =4, Undecided (UN) =3, Disagree (D) = 2 and Strongly Disagree (SD) =1. The questionnaire were

be administered to the top, middle and lower-level management staff of the selected manufacturing firms of the study.

RESULT AND DISCUSSIONS

Data Presentation and Analysis

Table 1: Return Rate of Questionnaire

Selected manufacturing industries	Questionnaire Distributed	% Distributed	Questionnaire Retrieved	% Retrieved	Questionnaire Lost	% Lost
PZ	81	24.8	70	21.5	11	3.4
ALO	64	19.6	52	15.9	12	3.7
Nigeria brewery	58	17.8	48	14.7	10	3.1
Bricks	24	7.4	18	5.5	6	1.8
Innoson	40	12.3	29	8.9	11	3.4
Hero	59	18.1	49	15.0	10	3.1
Total	**326**	100	266	81.5	60	18.5

Source: Field Survey, 2023

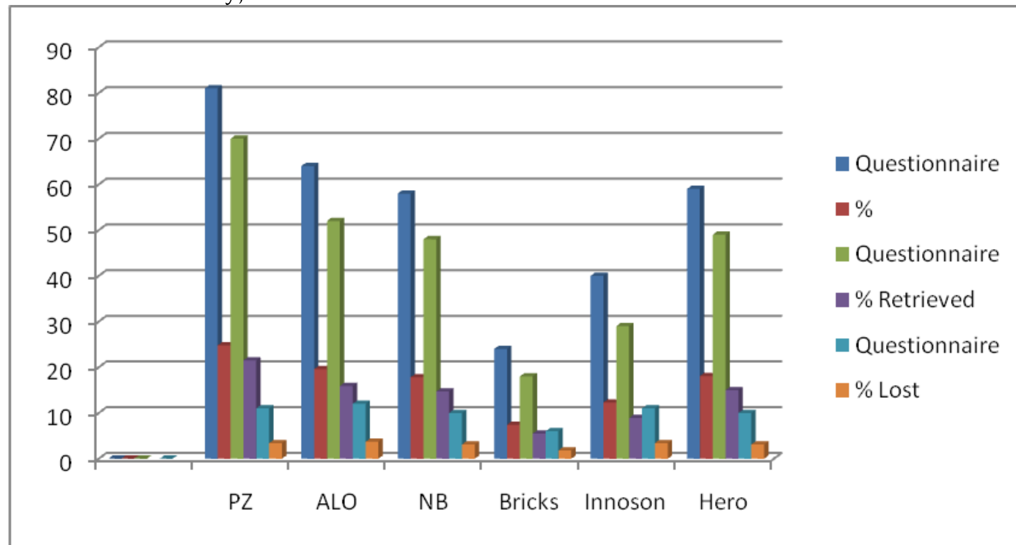

Figure 1: Analysis of the total number of questionnaire distributed, retrieved and lost

Table 1 and chart 1 respectively revealed that a total of three hundred and twenty-six (326/100%) copies of the questionnaire were distributed to the various study groups. Out of this number, two hundred and sixty-six (266/81.5%) questionnaire were filled and retrieved while sixty (60) questionnaires were wrongly filled with percentage ratio of 18.5%. This outcome formed the basis for further analysis.

Table 2: Ascertain the effect of strategy implementation and business expansion on the effectiveness of selected manufacturing firms in South East, Nigeria;

RESPONSES	SA 5	A 4	UN 3	D 2	SD 1	Total	Mean	Std Dev.
Waste disposal laws of the region affect the efficiency and effectiveness of manufacturing firms in the south east region of Nigeria.	131	63	34	25	13	1072	**4.030**	0.888
Energy consumption, and prevailing attitudes toward the environment of manufacturing firms affect their effectiveness in the south east Nigeria.	127	68	38	19	14	1073	**4.034**	0.872
Climate change management and general regulations on business affect firm's effectiveness in the South East, Nigeria.	123	56	44	25	18	1039	**3.906**	0.786
Population and health hazards affects the effectiveness of manufacturing firms in the	138	63	12	30	23	1061	**3.989**	0.960

South East, Nigeria.

Source: Field Survey, 2023

Table 2 showed the effect of strategy implementation and business expansion on the effectiveness of selected manufacturing firms in South East, Nigeria. The adopted decision rule/mean score of $\bar{x}$3.00 was used to reject or accept the outcome of the responses from the respondents based on five (5) points likert scale. The mean scores values of 4.03, 4.03, 3.90, and 3.98 respectively indicated a strong agreement that Waste disposal laws of the region affect the efficiency and effectiveness of manufacturing firms in the south east region of Nigeria, Energy consumption, and prevailing attitudes toward the environment of manufacturing firms affect their effectiveness in the south east Nigeria, Climate change management and general regulations on business affect firm's effectiveness in the South East, Nigeria and Population and health hazards affects the effectiveness of manufacturing firms in the South East, Nigeria. On the other hand, the standard deviation values of 0.88, 0.87, 0.78 and 0.96 respectively justifies the decision of the respondentson the effect of strategy implementation and business expansion on the effectiveness of selected manufacturing firms.*Strategy as a management practice in any firm* allows for effective *communication* that is predicated upon certain business values, such as practice of good faith, responsiveness and responsibilityto works and words geared towardsachievement of set objectives. Thus, expansion of business becomes inevitable with strategic management practices which eventually define the level of effectiveness of the manufacturing firms under review.

HO_4: Strategy implementation and business expansion do not significant effect on the effectiveness of selected manufacturing firms in South East, Nigeria

Table 3: Simple regression on strategy implementation and business expansion on organizational effectiveness

Variable	Parameters	Coefficient	Std error	t – value
Constant	β_0	-0.208	.068	-3.078
SiBE (X_1)	β_1	0.234	.051	5.496**
R-Square		0.951		
Adjusted R – Square		0.950		
F – statistics		2479.277***		

Source: Author's computation, using SPSS.

The simple linear regression result presented in Table 3showed that strategy implementation and business expansion have significant effect on organizational effectiveness of selected manufacturing firms in South East, Nigeria. The coefficient of determination (R^2) 0.951showed a very high goodness of fit of the regression line and explains the variations in the dependent variable explained by the changes in the independent variable while the unexplained variation (1-0.951)was leftas the stochastic variable. On the other hand, the high significance of the F-statistic showed that the regression model adopted in this study was statistically significant at 1% probability level.

The coefficient of that strategy implementation and business expansion was statistically significant and positively related to the organizational effectiveness at 5 percent level (0.234***) with t-statistic value of [5.496]. This outcome implies that a percentage change in strategy implementation will cause the organizational effectiveness to increase by 23.4%. Therefore, the study rejected the null hypothesis of insignificant effect and accept that strategy implementation and business expansion have significant effect on the effectiveness of the selected manufacturing firms in South East, Nigeria.

Discussion of findings

The simple regression result from hypothesis four stated that strategy implementation and business expansion have significant effect on selected manufacturing firms in South East, Nigeria. Majority of the respondents strongly agreed that Waste disposal laws of the region affect the efficiency and effectiveness of manufacturing firms in the south east region of Nigeria, Energy consumption, and prevailing attitudes toward the environment of manufacturing firms affect their effectiveness in the south east Nigeria, Climate change management and general regulations on business affect firm's effectiveness in the South East, Nigeria and Population and health hazards affects the effectiveness of manufacturing firms in the South East, Nigeria. Therefore, firms with good strategy implementation are bound to practice good succession planning adapted to change and achieve efficient performance. Kimotho and Mwasiaji (2019) in a study affirmed that there is a positive relationship between corporate management strategies and performance of the sampled Stima Sacco Society limited in Nairobi, Kenya; hence, employees' have to adopt a collaborative leadership strategy to enhance organizational performance. In another study, Muendo and Ogutu (2020) findings demonstrated that strategy implementation is a boost to effective

mobilization and management of staff in order to enhance performance. Again, business management should impact social change by developing and creating strategic management culture from diverse backgrounds to ensure future business growth in emerging competitive business environment.

CONCLUSION AND RECOMMENDATIONS

Strategy implementation and business expansion have a significant effect on effectiveness of selected manufacturing firms in South East, Nigeria. (R^2 was 0.934 and the coefficient of Strategy implementation and business expansion was statistically significant and positively related to organizational effectiveness at 1 percent level 0.382*** or 38.2%). Therefore, management should continuously emphasis on strategy implementation and business expansion very seriously because expansion in all spheres of the firm will lead to sustainable growth and create avenue for delegation of function and harnessing of skills from potential employees. Expansion will equally aid management to effectively discover opportunities and new environment of business with measures to foster survival.

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SUB THEME
MARKETING, ENTREPRENEURSHIP AND ENDOGENOUS AFRICAN BUSINESSES FROM INNOVATIVE ACTIONS TO SUSTAINABILITY

AGENCY BANKING AND JOB CREATION BY NIGERIAN YOUTHS

Esi-Ubani Chidiadi O. and Ngwobia, Ebubechukwu U.
Abia State University, Uturu
Corresponding author: esiubanich@gmail.com

ABSTRACT
The research investigated agency banking and its effect on Nigerian youths related to entrepreneurship and job creation. This study used A survey design and descriptive and analytical research designs based on quantitative data targeting 20 participants per geopolitical zone of the country, making a total of 120 participants for the 6 geopolitical zones in Nigeria. Descriptive statistics and multivariate regression were adopted in this study for data analysis and the test of hypotheses. Findings confirmed that Nigerian youths are very familiar with agency banking and have a positive attitude towards it.Keywords: Agency banking, Employment, Job creation.
Keywords: agency, banking, Nigeria, job creation and youths

INTRODUCTION
The term "agency banking" describes the provision of financial services outside of traditional bank branches, frequently through non-bank retail locations that depend on POS (Point-of-Sale) terminals or mobile phones for real-time transaction processing (Modupe, 2010). An organization hired by an institution and given the go-ahead by the Central Bank to perform services for the institution on behalf of the institution—typically a bank—is referred to as a bank "Agent." Agency banking is a business model used by banks that entails using the services of independent retail networks to deliver financial services to hard-to-reach places and people on behalf of licensed and reputable banking institutions. One of the retail channels used by different financial institutions to offer their banking services to many people is agency banking (Capegemini, 2013).
As part of the Central Bank of Nigeria's (CBN) strategy to advance financial inclusion and generate jobs, agency banking was launched in Nigeria in 2013. The Central Bank of Nigeria created the Shared Agent Network Expansion Facility (SANEF) to find, train, and help more people become agents. To encourage companies to expand their agent networks in underserved cities nationwide, SANEF also offers some financial help to enterprises. The method eliminates the need for people to travel large distances to banks to conduct financial transactions (Akewushola, 2021).
Unemployment among Nigerian youths, particularly young school leavers, has grown increasingly concerning. Nigeria's high unemployment rate has prompted the government to develop new strategies to encourage young people to be self-employed, reducing the wait for a white-collar job. The shared agent network expansion facilities (SANEF) is one of these projects, which aims to expand financial inclusion while empowering and providing jobs for Nigerians. SANEF made agency banking platform access simple and the business less capital demanding, enabling more young people to participate. The Agency banking company operates in tandem with other small-scale companies such as salons, petty trade, and fashion design in such a manner that it complements an already existing business, allowing young entrepreneurs to spread risk and earn more money. Aside from the exciting endeavor, obstacles like poor internet access, insecurity, exorbitant service provider charges, and the danger of carrying lots of cash, among others, have become prevalent risks in the agency banking business, prompting some individuals to reconsider and examine other businesses that do not involve these risks.
However, the extent to which agency banking can engage youths and lower unemployment rates is still being determined. This study aims to assess agency banking practices in light of the identified concerns and determine their impact on Nigerian youths. Most studies have focused on the effect of agency banking on financial inclusion, poverty reduction, and bank profitability rather than the significant impact of agency banking. This study aims to determine the perceived attractiveness and feasibility of agency banking among Nigerian youths and how it motivates them to become entrepreneurs, hence lowering the country's unemployment rate.

LITERATURE REVIEW
Agency banking refers to partnerships with non-banks, particularly retail and commercial establishments like kiosks, pharmacies, post offices, hair salons, supply stores, and others, to create a distribution network for financial services (Mwangi, 2015). It entails providing financial services outside conventional bank

branches, typically through technology-dependent non-bank retail firms (EFINA, 2012). "The supply of banking services to clients by a third party (Agent) on behalf of a regulated deposit banking institution (FI) and Digital Payment Companies," according to the Central Bank of Nigeria (CBN), is what agency banking is defined as (CBN, 2017). An agency bank is a business that operates as an agent for the parent company but represents another bank and cannot accept deposits or make loans in its own right (Santu *et al.*, 2017).

The rise of agency banking has been spurred by the expansion of mobile financial services in Africa and Asia, which has resulted in the development of numerous point-of-sale (pos) locations across the nation (Mbiti & Weil, 2015). Due to government programs like SANEF and other financial incentives, banks and Fintech companies in Nigeria have established a network of agents. A small network of agents and POS operators has expanded to an incredible coverage of major cities nationwide in just a few short years. This has led to price reductions for devices and fees, allowing more potential agents to select them over competing offerings.

The requirements for becoming an agent have been lowered, the procedure has taken less time, and it is no longer necessary to have a corporation registered with the Corporate Affairs Commission. The low cost and straightforward requirements for getting started have increased the number of consumers, retailers, and small business owners signed up for agency banking. If interested agents complete the registration requirements, they are now provided free POS terminals that can cost up to N50,000.

Agency banking is thought to inspire young people in Nigeria to launch their enterprises. Consider business success measures like monthly revenue, customer count, and transaction volume. For young people in Nigeria, agency banking has grown to be quite appealing as a long-term endeavor that may be followed either full-time or as a side gig to augment the income of the underemployed.

Theoretical Review

Bank-Led Model

Cameron developed this theory in 1972 during the transformation of moneylenders into merchants' banks, which resulted in the birth of modern banking. This version consists of three major entities: the financial institution, the retail representative, and the consumer. According to Gichuki and Jagongo (2018), "the bank-led model offers a different perspective to the known practice of providing banking services by enabling consumers to execute financial transactions through individuals and traders who serve as agents rather than using the banking hall and professional staff of a bank. This model expands financial services' reach significantly by allowing the services to be delivered through other non-professional individuals, retailers, and traders, cost-effectively targeting segments that would have needed to be easier to reach with the traditional banking system. (Sudalaimuthu & Angamuthu, 2013).

A bank or fintech company distributes financial services through an agent in the most basic variant of the bank-led branchless banking model. In other words, Although the bank generates financial goods and services, they are distributed through agents who process consumer transactions. The bank-led theory was used in this study because it precisely represents the concept of agency banking being examine.

The entrepreneurial event model

Shapero and Sokol (1982) created Shapero's Entrepreneurial Event model to describe the interaction of cultural and social elements that can cause a firm to be created by altering a person's beliefs. In this regard, the model sees entrepreneurship as a potential alternative or available choice that develops in response to an outside shift. The most prominent factors of entrepreneurship intention, according to EEM, are three components (PD, PF, and PA). According to Agu *et al.* (2021), the approach is particularly contextual, addresses a person's entrepreneurial desirableness, and is more suited to studies on entrepreneurship and innovation.

Perceived desirability (PD) refers to “the personal attraction to beginning a business, taking into account both intrapersonal and extra personal factors” (Shapero & Sokol, 1982). It describes how people regard doing business to be an appealing option, as evidenced by their desire to engage in that behavior to achieve specific goals (Krueger et al., 2000). Desirability refers to specific entrepreneurship outputs or outcomes in terms of the costs and rewards to the entrepreneur (Agu *et al.*, 2021). Perceived Feasibility (PF) is "the probability of success of an entrepreneurial enterprise as determined by an individual. It is the degree to which a person believes he or she is personally competent in starting a business" (Krueger et al., 2000). Perceived feasibility can be influenced by profitability and acceptance of the venture one intends to enter and the perceived availability of resources necessary to start a business. Propensity to act (PTA) is “the amount to which an individual has the disposition to act on his or her decision“ (Agu *et al.,* 2021). It is the personal tendency to follow through on one's intentions and make them a reality, notwithstanding the setbacks he may face.

Critical Linkages

In Benue State, Nigeria, Akighir *et al*. (2020) concluded that agency banking would boost the economy, create more jobs, and lessen poverty. Ezeh *et al.* (2019) called for effective structural policies on sustainable finance and other areas to reduce young unrest and create income and jobs. Barasa and Mwirigi (2013) concluded that the agency banking model has helped low-income populations understand banking and put beneficiaries on a clear route to financial security. Okoye-Nebo *et al.* (2014) stated that an entrepreneurial nation is an engine for job creation, innovation, and diversity. Nigeria's entrepreneurs have a long way to go before effectively driving economic changes. It advises that government (policymakers) should genuinely recognize the essence of entrepreneurship to economic development by providing a supportive environment and safe environment for young people to be gainfully employed for economic development and all other social, political, and economic advancements. Nwachukwu *et al*.(2019) findings showed that although agent banking and mobile money are becoming increasingly popular, more financial inclusion is needed.

METHODOLOGY

This study used survey design and descriptive and analytical research designs based on quantitative data. The main attributes of the study's participants were young Nigerians aged between 18 and 34 who live in the country's six geopolitical zones in Nigeria. This research population was deemed a fair representation of the population to provide credible insight into the study's topic. The researcher targeted 20 participants per geopolitical zone of the country, making 120 participants for the 6 geopolitical zones when responses from a geographical zone were not up to 20.

Purposive sampling was used to target participants. This was achieved through targeting groups on WhatsApp where Nigerians who possess the attributes of participants needed for this study (young Nigerians aged between 18 to 34 who live in the country's six geopolitical zones in Nigeria) are part of and distributing the online questionnaire to them. The questionnaire was distributed through Google Forms, enabling participants to complete it comfortably online via a link.

Descriptive statistics were used to examine the participants' socioeconomic characteristics. Multivariate regression analysis was used to examine hypotheses (i), (ii), and (iii).Multivariate regression was adopted in this study because of its objectives, which focused mainly on the effect of agency banking on more than one variable of the dependent variables relating to Nigerian youths. This includes Nigerian youths' perceived desirability, feasibility, and propensity to act.

RESULTS AND DISCUSSIONS

Responses to questions related to research variables

Table 1: Agency Banking and Nigerian Youths

Statements	SA	A	D	SD	UN
I have a positive attitude toward agency banking	71	38	6	-	2
	60.7%	32.5%	5.1%	-	1.7
The concept of a point-of-sale business appeals to me	57	51	4	4	1
	48.7%	43.6%	3.4%	3.4%	0.9%
I will consider opportunities that will lead to job creation	73	34	6	4	-
	62.4%	29.1%	5.1%	3.4%	-
I will consider the capital requirement and profitability of opportunities	65	44	6	2	-
	55.6%	37.6%	5.1%	1.7%	-
I will make every attempt to develop and operate my own POS company.	56	39	13	4	-
	47.9%	33.3%	11.1%	3.4%	-
Being an Agency banking entrepreneur will offer me more benefits than difficulties.	50	45	13	3	6
	42.7%	38.5%	11.1%	2.6%	5.1%
I enjoy being a profit-driven business owner.	71	36	5	5	-
	60.7%	30.8%	4.3%	4.3%	-
	54	37	13	6	7
I would like to become an agent when I have the required resources.	46.2%	31.6%	11.1%	5.1%	6.0%
I am sure that the agency business will be profitable for me	56	43	10	3	5
	47.9%	36.8%	8.5%	2.6%	4.3%
I believe I have all the information and training needed to become an agent	41	44	22	4	6
	35.0%	37.6%	18.8%	3.4%	5.1%
I see a few things that could be improved in beginning my own POS firm.	49	41	21	4	2
	41.9%	35.0%	17.9%	3.4%	1.7%
Every POS bank agent I have met confirmed it is a profitable business	55	41	14	4	3
	47.0%	35.0%	12.0%	3.4%	2.6%
Risks relating to agency banking will not hinder me from being an agent	46	48	10	7	6
	39.3%	41.0%	8.5%	6.0%	5.1%
I will try my best to become an agent	44	43	18	4	8
	37.6%	36.8%	15.4%	3.4%	6.8%
I am determined to complete the task of owning a POS business	46	44	11	8	8
	39.3%	37.6%	9.4%	6.8%	6.8%
I have begun looking for locations to start my own business	47	33	23	7	7
	40.2%	28.2%	19.7%	6.0%	6.0%

Source: Researcher's Survey, 2022

Table 1 displays a descriptive analysis of participant responses to questions that were weighted and further evaluated before being utilized in hypotheses. These queries represent the variables of the subject under study. The first query aimed to ascertain how Nigerian youth felt about agency banking. Strongly agreeing with having a positive attitude toward agency banking was expressed by 71 respondents (60.7%), agreeing by 38 respondents (32.5%), disagreeing by 6 respondents (5.1%), and remaining neutral by 2 respondents (1.7%). The percentage of respondents who agreed and strongly agreed with the statement that the idea of a point-of-sale business appeals to them was greater (92.4%) in the table. The participants said they would think about prospects that would result in the creation of jobs, with 73 saying they strongly agreed (62.4%), 34 saying they agreed (29.1%), 6 saying they disagreed (5.1%), and 4 saying they severely disagreed (3.4%).

According to the data in the table, a larger proportion of participants concurred that they would consider possibilities' capital needs and profitability and would try their best to create and run their own POS firm. 81.2% of participants said that because they like running a profit-driven firm, agency banking will provide them with more advantages than challenges. They also said they would be open to becoming agents once they had the necessary funding because they thought the agency business would be lucrative.

According to the survey respondents' responses in Table 4.5, 72.6% agreed they had all the knowledge and training necessary to become agents, and 76.9% said they did not foresee any challenges in starting their agency banking firm. This claim is supported by the 82% of participants who concurred that every agency banking representative they had encountered had attested to the company's profitability. The following responses were given to the statement: Agency banking risks will not prevent me from being an agent: 46 (39.3%) strongly agreed, 48 (41.0%) agreed, 10 (8.5%) disagreed, 7 (6.0%) disagreed, and 6 (5.1%) uncertain.

With 68.4% of respondents actively seeking sites to launch their businesses, participants admitted they would do their best to become agents and were determined to start an agency banking firm.

Considering the nature of the variables involved in this study had one independent variable (Agency banking) and multiple variables explaining the dependent variable, Nigerian Youths (perceived desirability to be an entrepreneur, perceived feasibility, and propensity to act), the Multivariate regression analysis using SPSS version 23 was adopted to explain the relationship between the variables and test the stated hypotheses.

The result of the analysis is presented in Table 2 below.

Table 2 Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Perceived Desirability	932.194[a]	11	84.745	16.949	.000
	Perceived Feasibility	857.942[b]	11	77.995	9.039	.000
	Propensity to act	961.930[c]	11	87.448	7.291	.000
Intercept	Perceived Desirability	3762.189	1	3762.189	752.435	.000
	Perceived Feasibility	3668.301	1	3668.301	425.123	.000
	Propensity to act	3575.490	1	3575.490	298.123	.000
AB	Perceived Desirability	932.194	11	84.745	16.949	.000
	Perceived Feasibility	857.942	11	77.995	9.039	.000
	Propensity to act	961.930	11	87.448	7.291	.000
Error	Perceived Desirability	525.002	105	5.000		
	Perceived Feasibility	906.023	105	8.629		
	Propensity to act	1259.301	105	11.993		
Total	Perceived Desirability	33824.000	117			
	Perceived Feasibility	31780.000	117			
	Propensity to act	30377.000	117			
Corrected Total	Perceived Desirability	1457.197	116			
	Perceived Feasibility	1763.966	116			
	Propensity to act	2221.231	116			

a. R Squared = .640 (Adjusted R Squared = .602)
b. R Squared = .486 (Adjusted R Squared = .433)
c. R Squared = .433 (Adjusted R Squared = .374)
Source: SPSS Version 23 Output, 2022

From the regression results, the coefficient of determination was 0.640 for perceived desirability, 0.486 for perceived feasibility, and 0.433 for propensity to act. This implies that 64%, 48.6%, and 43.3% of the variation in the dependent variables can be explained by variations in the Dependent variable, Hence providing evidence that the independent variable affects the dependent variables. This explains that agency banking affects Nigerian youths by making them find entrepreneurship more desirable and feasible and encouraging them to start a venture.

The analysis confirmed if the independent variable's effect on the dependent variables was significant. With F- Value = 16.949 and P-Value=.000 for hypothesis one, F- Value = 9.039 and P-Value= .000 for hypothesis two, and F- Value = 7.291 and P-Value=.0000 for hypothesis three. Since the p-value for

the three hypotheses stated $<\alpha=0.05$, we reject the null hypothesis and accept the alternative hypothesis. Hence:

i. HA1: Agency banking has a significant effect on the Perceived desirability of Nigerian youths to become entrepreneurs

HA2: Agency banking has a significant effect on the Perceived feasibility of entrepreneurial ventures of Nigerian Youths

HA3: Agency banking significantly affects the Propensity of Nigerian youth to act on a business venture.

Discussion of Findings

According to research, young people in Nigeria are quite familiar with agency banking and have a favorable opinion of it. This demonstrates that agency banking has gained recognition among young people in Nigeria and is now seen as a viable enterprise. The majority of respondents went on to say that they like the idea of point-of-sale businesses. This was also the case in Nwachukwu et al.'s (2019) study, which found that mobile money and agent banking are becoming increasingly popular in Nigeria and that more Nigerians are using them.

More than 90% of the respondents said they would consider opportunities that would create jobs. Given the nature of unemployment and underemployment in Nigeria, this is evident. Young individuals can become self-employed through agency banking, and those already working can increase their income by starting a business and hiring someone to help run it, which will also create jobs. This is consistent with the conclusions of Akighir et al. (2020), who claimed that the introduction of agency banking in Benue State, Nigeria, will boost economic activity and employment and lessen poverty. Additionally, according to Barasa and Mwirigi (2013), agency banking is a sure way for young Nigerians to achieve financial security. Ezeh *et al*. (2019) and Okoye-Nebo *et al*. (2014) affirmed that government programs like agency banking will create revenue and employment and significantly contribute to the nation's GDP.

Young people in Nigeria do not perceive any challenges in starting their own agency banking business, according to the information provided by the respondents for this study, which confirms that information and training on agency banking are available for those interested in starting a venture from it. Nigerian youngsters will not be deterred from entering the agency banking industry by its associated hazards. Participants admitted that despite the risks of robbery, poor network and internet connections, and unreliable bank platforms, they would make every effort to become agents and are committed to launching an agency banking business. According to this study, agency banking significantly affects Nigerian youths by encouraging them to create businesses and making entrepreneurship more appealing and feasible.

CONCLUSION AND RECOMMENDATIONS

In light of the above discussions, the article concludes that agency banking can be a key driver and propeller of youth entrepreneurial intention in Nigeria. This study also concludes that their a growing awareness of how agency banking through the use of POS for transactions has become either a source of self-employment or a means of the second income stream among Nigerian youths. This was made possible through the introduction of programs by the Nigerian government like the SANEF and the fact that the access to information and training required to start the agency banking business has become available to all, and the cost of obtaining materials has become cheap due to competition and introduction of FINTECH companies in Nigeria.

Based on the findings of this study, it is concluded that agency banking has a significant effect on Nigerian Youths.

First and foremost, the Nigerian government should help Nigerian youths take advantage of the growth opportunities in agency banking by implementing policies like providing adequate security and working with others to build the infrastructure necessary to improve the internet and system network for agency banking. They can reduce the risks connected to agency banking by doing this.

Second, agencies offering agency banking services and FINTECH enterprises should increase their efforts to raise public awareness of financial literacy. Banks might collaborate with traditional leaders and religious figures to inform the populace about the effectiveness of agency banking. Therefore, traditional leaders and religious figures can promote agency banking as a safe, cutting-edge, and contemporary system.

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CONSUMER EDUCATION AND ENTREPRENEURIAL PERFORMANCE OF WOMEN IN BEAD MAKING IN ABA, ABIA STATE, NIGERIA

[1]Nzeoma, Sunday P., [2]Dibie, Victor M., [3]Ukpai, Kalu U. and [2]Onyemachi, Joy O.
[1] Imo State Polytehnic, Omuma, Imo State, Nigeria.
[2]Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.
[3]Happuch Education Centre, Rumuola, Port Harcourt, Rivers State, Nigeria.
Corresponding author: v.dibie@gmail.com

ABSTRACT

The study focused on consumer education and entrepreneurial performance of women in bead making in Aba, Abia State. The specific objectives of the study were to; determine the influence of consumer orientation on entrepreneurial performance of women in bead making, examine the influence of consumer education on sales growth of women in bead making and examine the influence of consumer education on level of patronage of women in bead making. To achieve the objectives of the study, descriptive research design method was adopted. The researcher adopted primary data in getting the required information. The data were generated using a structured questionnaire. The sample size of the study was 100 women entrepreneurs. In testing the hypotheses, simple regression analysis of variance was used. The first findings revealed that consumer orientation has a significant influence on entrepreneurial performance of women in bead making. The second findings revealed that consumer education has a significant influence on sales growth of women in bead making. The third findings revealed that consumer education has a significant influence on level of patronage of women in bead making. The study concludes that consumer education influences entrepreneurial performance of women in bead making. Based on the findings, the study recommended that; education required to enhance customer expertise for various products and services to be identified and developed to create opportunities for co-production; organizations that view relationships with clients as dynamic should develop training programs to manage the distribution of knowledge to achieve a competitive advantage; SMEs owners should invest more on quality training, education and empowerment of their apprentices as they affect the innovative behavior of entrepreneurs. Finally, government should introduce policies that can ensure women freedom to available training and the right to own and manage SMEs.

Keywords: Consumer Education, Entrepreneurial Performance, Bead Making, Women, Aba.

INTRODUCTION

Without a doubt, the Nigerian economy has undergone many transformational phases over the years, with the focus progressively shifting back to micro and small enterprises (MSEs) from agriculture to small and medium-sized firms depending on crude oil. MSEs are crucial to the economy's survival and growth. These days, entrepreneurship is regarded as a way to reduce poverty and unemployment and is increasingly important to economic growth.According to Mayoux (2001), Ndubusi (2004), and Okafor and Mordi (2010), Micro, Small, and Medium-Sized Enterprises (MSMEs) make up almost 97% of all businesses, 60% of the nation's GDP, and 94% of all jobs. Consequently, MSEs make up a larger portion of a country's GDP.

Since MSEs are often where women in business find higher success, women are more interested in founding and managing MSEs,Since women make up the majority of MSMEs, according to Okafor and Mordi (2010), they are the driving forces behind a quickly growing economy since they make reasonable contributions to the creation of wealth, jobs, and businesses of all types, from small home-based businesses to medium-sized enterprises.An increase in the number of women entrepreneurs who see self-employment and entrepreneurship as a career choice, a chance to create jobs, a means of sustaining and growing businesses, and an avenue to improve access to financing are all necessary to accelerate economic growth (Shah, 2015).

Onuorah and Olikagu (2011) state that women have shown interest in self-employment, beadwork, and entrepreneurship as means of producing money, both in urban and rural regions. However, they found that women entrepreneurs knew very little about the things that drive success in the MSEs they run and the factors that affect their behavior and entrepreneurial activity. However, innovative thinking, taking calculated risks, and being proactive are entrepreneurial traits that define the success of MSEs, and these are easily learned when one receives entrepreneurial education and training. Mbugua (2016) asserts that via lowering unemployment and poverty, entrepreneurship plays a critical role in improving people's

financial conditions as well as the growth of industry. Mulugeta (2010) expressed agreement with the previously described perspective, adding that entrepreneurship is increasingly recognized as a substantial engine of economic development, productivity, innovation, and employment. It is widely accepted as a fundamental component of economic dynamism. Developing ideas into successful companies is the secret to success in business. In their 2000 summary, Shane and Venkataranman stated that entrepreneurship is essential since it raises employment levels, improves economic efficiency, and brings new ideas to the market.

Customer learning is essential to co-creating value (Peter *et al.,* 2013).To effectively engage in and contribute to value creation, consumers must acquire the knowledge, abilities, and behaviors related to the production, consumption, and acquisition of products and services (Baba, 2013). Since they think it fosters stronger customer loyalty and more lucrative connections, many businesses have realized the value of customer education and some have even made it a top priority (Ali, 2015).

Recognizing the importance of enduring connections, service businesses in competitive marketplaces make an effort to engage with clients (Katua, 2014). Mutual learning and continuous communication are essential components of success. Customer education is said to be crucial for developing customer competence, which in turn strengthens the connection between the two parties (Bostjan, 2013).

A range of instructional programs, including workshops, brochures, blogs, forums, expert advice, and seminars, can be used to provide customer education. Service providers can strengthen their business relationships by educating their clients (Buchard, 2011). Service providers can also offer technical support that increases customer loyalty and encourages dependability.

MSMEs, or micro, small, and medium-sized enterprises, are seen to be the foundation of both economic expansion and national competitiveness. From an economic and technological perspective, small enterprises place more emphasis on innovation and proactivity than do larger corporations. Even though they are the driving force behind MSMEs, women control the bulk of these businesses, and the unpaid services they give to families are not legally counted as part of GDP. The bulk of them run their businesses with little to no current knowledge, skills, or abilities linked to entrepreneurship, despite their importance and role in the nation's prosperity. As a result, it is therefore crucial that all governmental levels and other pertinent stakeholders give this subsector their undivided attention and ensure that it is growing and boosting the economy. But as Grace (2015) has demonstrated, not all Nigerian women have received the required business knowledge. It is intriguing to consider whether education and training may enable these women to reach their greatest potential, foster an entrepreneurial mindset, and engage in more business endeavors.

Rather than focusing on current business owners who are doing it incorrectly, many studies in the field of education and training, such as those by Mohammed (2015) and Karimi *et al.* (2011), focus on students' developing entrepreneurial intention when they intend to pursue it as a career. Njoroge and Gathungu (2013) study suggested that education and training had a detrimental impact on entrepreneurial success, whereas Kisaka (2014) study showed that these factors had a positive impact on the behaviors of entrepreneurs.Thus, revealing a controversial effect on entrepreneurs.

Despite being surrounded by business opportunities and facing unemployment and poverty, evidence shows that women entrepreneurs still contribute very little to economic growth (World Bank Report, 2016). In spite of their empowerment and training, many who run their own businesses, however, lack the creativity to solve problems and the ingenuity to grow their businesses. It is consequently challenging for female entrepreneurs to expand from microbusinesses to small- or medium-sized enterprises. As the economy grows, we need more bold, innovative, and creative women entrepreneurs. The study attempted to answer the following research question: What is the influence of consumer orientation on entrepreneurial performance of women in bead making? To what extent does consumer education affect sales growth of women in bead making? How does consumer education affect the level of patronage of women in bead making.

REVIEW OF LITERATURE

Entrepreneurship

Entrepreneurship may be defined in a variety of ways. Entrepreneurship is the process of identifying a business opportunity, turning it into a worthwhile product or service, and using available resources to meet market demand. Entrepreneurship is the process of using available funds to start a business endeavor with the intention of making money in an open and free market economy. Aruwa (2016) defines entrepreneurship as the ability and desire of an individual to search for investment opportunities, establish, and successfully run a firm. This expression is used to characterize creativity, inventiveness, and the

introduction of modern products and services that might prove to be profitable business endeavors. Creating and nurturing a large number of qualified entrepreneurs who can effectively operate creative firms, nurture them to expand and maintain them, and eventually accomplish wide socio-economic developmental goals is what Oni (2012) and Mohammed (2011) define as entrepreneurship. Additionally, a country's existing stock of small, medium, and big firms is increased through this process. Vis (2012) defined entrepreneurship as the search for opportunities outside the resources that are currently within your control. This concept takes into account both the individual and the society in which they live. Societal cultures have the capacity to shape people's attitudes, behaviors, and perceptions.

According to Baba (2013), becoming an entrepreneur means taking a risk, creating new values where none previously existed, starting a new business, especially a new organization, and creating new riches via the application of novel ideas. Baba (2013) asserts that what ties entrepreneurs together is not their personalities, but rather their commitment to creation. Innovation requires not just aptitude, ingenuity, and knowledge but also hard effort, intentionality, and attention from entrepreneurs.

Working for yourself, providing opportunities for others to work, and addressing market shortages through the launch of new companies and the creation of innovative products and services are all part of being an entrepreneur. It's not all about wealth creation but about searching for new opportunities that can turn the world around.

Entrepreneurship education

Entrepreneurship education serves as a model for both the expansion and development of entrepreneurship as well as a successful business. An entrepreneurship-focused education prepares a person's mind to take on the task of founding a business and creating something novel by applying their learned skills and knowledge. A range of environments, including formal educational ones like classrooms and informal ones like seminars, public speaking, mentoring, and teaching, may be used to teach and develop entrepreneurial skills.

According to Baba (2013) and Hillis (2014), "entrepreneurship education is the processes of acquiring the knowledge, attitudes, and skills of entrepreneurship." According to Tsai (2011), education is the process of transferring knowledge and fostering the development of skills through instruction and training, especially at colleges or universities.Thus, via fostering competence, independence, efficiency, and a sense of national identity, education not only acts as a catalyst for the economic advancement of an area but also as a holistic tool for the development of an individual's mental, physical, moral, and distinctive traits. Education develops creativity, and creativity produces thinking, which produces knowledge, which produces the unique qualities that distinguish oneself. For this reason, an educated person makes a wonderful entrepreneur.

By providing pertinent training for self-reliance, profit motivation, and self-reliance, entrepreneurship education would, among other things, stimulate industrial and economic growth in isolated and underdeveloped areas (Oni, 2012). It is necessary to promote innovation and self-sustaining development.Therefore, requiring women to finish entrepreneurship education before starting or during their company operations will improve their standards and abilities and allow them to use their creative ideas to substantially contribute to the economic prosperity of their communities. Thus, the essence of entrepreneurial education is in practice-oriented learning that integrates the outside world, nurtures creativity, and inspires initiative and action. It requires social connection in addition to the teacher's direction and example. Like Vis (2012), Nayab (2011) makes it clear that developing a wide range of useful talents is essential for successful entrepreneurship and that prospective business owners may find value in the knowledge provided by experienced entrepreneurs.Women entrepreneurs who network and share ideas and experiences are more likely to succeed and make fewer mistakes, even when entrepreneurship courses may not seem useful. Education may be used to link the learning of entrepreneurial knowledge, beliefs, and behaviors with behavior, claim Kisaka (2014) and Mullis (2015). Increased sales and productivity from this might lead to corporate growth and economic expansion overall.

Importance of entrepreneurship education

The influence of entrepreneurship education on the behavior of female entrepreneurs cannot be overstated. Entrepreneurship education is essential for the general public as well as other consumers of value goods and services, not only company owners. Education increases entrepreneurship success because an entrepreneur becomes more successful the more gifted, skillful, and educated he is.

Gaining a degree in entrepreneurship enhances one's ability to think creatively, independently, and succeed in the marketplace. A degree in entrepreneurship expands one's network of potential customers and motivates prospective entrepreneurs to invest more of their time in research and development, which stimulates innovation and creativity and leads to the invention of new goods. Entrepreneurship education

pushes entrepreneurs to be bold enough to take risks, flexible enough to toss away ideas that don't work, and perceptive enough to determine what will thrive based on their observations of the environment.
Mario and Arminda (2011), Rajani (2018), and Schillo (2011) cite a number of factors that suggest education plays a critical role in encouraging entrepreneurship. Above all, education helps individuals feel more independent, self-sufficient, and free. Second, education gives individuals access to a variety of career opportunities. Thirdly, people's viewpoints are widened by education, which enhances their capacity to perceive opportunities. Finally, education provides knowledge that individuals may apply to generate new business opportunities.

Entrepreneurship training
The essence of entrepreneurship training is experiential learning; it gives an entrepreneur the ability to enhance their theoretical knowledge with practical experience and refine their entrepreneurial skills for running a business. An "entrepreneurship training" program seeks to alter an entrepreneur's perspective and skill set in order to enable them to start a new business or expand an already-existing one (Peter *et al* 2013). Norman (2013) claims that training is a process of developing new skills. An entrepreneur's aptitude for creativity and initiative is shaped by their background in picking up new abilities, absorbing knowledge, and applying it to MSEs. Particularly, technical and vocational training has a big impact on a person's ability to develop and progress their company.
According to Syukuuiah *et al.* (2013), Brush (1992), Kain and Sharma (2013), and others, entrepreneurship training can provide the more practical skills that entrepreneurs need when they're ready to start their own business, thereby supporting the early-stage awareness-raising function of entrepreneurship education. The importance of entrepreneurship education in the growth and development of the MSE sector has been highlighted globally. According to Peter *et al.* (2013), it has been recognized as an essential tool for helping people with entrepreneurial tendencies change their viewpoint and learn new skills. Books, conferences, workshops, and professional meetings may all be used to teach people to realize their creative potential.
As a result, ongoing training is necessary to encourage women entrepreneurs in Gombe State to start and grow their businesses. This is a response to the dynamic nature of the business world, which includes shifts in technology and how it is used, which may foster innovation and creative thinking. Despite the advancements in technology, many female entrepreneurs are undereducated or do not have formal education, therefore they lack the technical expertise necessary to utilize the newest technologies. According to UNIDO (1995), many women in poor countries do not have access to the kind of education that may lead to successful entrepreneurship (Kain and Sharma, 2013). They frequently lack the capacity to do research and obtain the required training, and they are either unaware of new technology or inadequate in using them.

Customer education
Customer education, according to Mbugua (2016), is any deliberate, organized, and structured learning activity designed by a business or industry to teach values, knowledge, or skills in present or potential customers. It might be anything from official training programs on a good or service to self-help guides for a particular item.
Businesses should see education as a crucial competitive strategy and consider the following potential results, according to Lane (2012):

- As businesses work to find and retain satisfied customers, there will be less disputes, which will enhance consumer impressions of the products.
- Businesses will benefit from greater income among other things.

In line with this viewpoint, a number of scholars suggested that education will eventually impact decision-making(Katua, 2014).
Mullis (2015) defines customer education as "the active involvement of customers in all aspects of training efforts.Mohammed (2015) characterized the significance of customer education as "the process by which companies systematically share their knowledge and skills with external customers to foster the development of positive attitudes". Dankens and Anderson (2001) further on the notion that "it directly increases their (customers') levels of satisfaction". Clients who receive the right training are more likely to be knowledgeable about products and to use them efficiently.
A growing body of empirical research has demonstrated that customer education is essential for seeking, improving, and expanding client participation (Akudole, 2015). Advertising, corresponding with customer care agents, pamphlets, conferences, and websites are noteworthy methods of client education (Anca & Alina, 2015).Demand for customer education is higher for complex services, new clients, and difficult-to-use products (Aruwa, 2016). Furthermore, it is essential for highly personalized services, independent of

whether the service activities are meant for people (health clubs and medical services) or physical things (trust banks and medical services). Empirical research suggests that customer education enhances perceptions of control (Bitner *et al*., 1997; Dabholkar, 1999), trust in the service provider (Eisingerich & Bell, 2008), and firm satisfaction (Baba, 2013). Oni (2012) lists three potential advantages of using consumer education as a marketing strategy: It makes it easier to attract and keep satisfied clients, cultivates a favorable opinion of a company or brand among consumers, and reduces friction with consumer advocates. Businesses may get a competitive edge and increase customer loyalty by using these strategies.

Theoretical Framework

The study is anchored on Human Capital Theory

Human capital is the sum of a person's knowledge, skills, experience, intelligence, and capabilities. Human capital theory developed by Becker (1993) states that education and experience aid in the acquisition of the skills required for efficient functioning. Improved human capital may be seen in a number of ways, including the ability to recognize high-value opportunities, develop new skills, and acquire and utilize resources (Kwabena, 2011).

Investing in knowledge, skills, and abilities boosts productive capacity and competencies to engage in a more innovative, adaptive, and entrepreneurial manner in a changing environment, according to human capital theory (Kwabena, 2011; Becker, 1964). According to Becker (1975), who Kwabena (2011) cites, the two cornerstones of human capital theory are education and experience.Since knowledge is a resource that is broadly distributed across people, knowledge gained through education and experience is crucial to understanding differences in opportunity perception and grabbing.

Because they lack entrepreneurship knowledge, some women face poverty and unemployment while having access to a plethora of business opportunities. The World Bank Report from 2006 supports the notion that one of the things that causes people to slip into sudden poverty is a lack of entrepreneurial abilities, which may actually build a sense of self-sufficiency. Through experience, education, and competent management skills, human capital may be used to foster entrepreneurship for economic growth and development. This is because it has the capacity to create new, more affordable, but effective production patterns. The previously mentioned idea states that education, experience, and skill sets help identify new company opportunities in the market and improve ones that already exist. One approach for female entrepreneurs to increase their knowledge is via education. Support their innovative and creative ideas, which might help small companies expand by producing new knowledge, products, services, and low-cost manufacturing techniques that can meet the needs of the general public and the economy.

Empirical Review

Mohammed (2015) sought to discuss the challenges encountered by women who operate their own businesses. Women have come a long way in the last several decades in achieving positions of authority in enterprises. This paradigm shift is a result of a number of reasons, including laws safeguarding equal opportunities and pay, moral hiring practices, changing public opinions of women in the workplace, and initiatives by businesses to advance brilliant women into executive posts in order to project a favorable image. With more and more educated women joining the workforce, the idea that a woman should stay at home, take care of the family, cook, go to the market, and babysit is becoming out of date. The number of women working for money is rising daily. The number of girls attending school is also increasing in Nigeria.The Gwagwalada Area Council in FCT Abuja is where this study was conducted. The population residing there is around 107 thousand.The mean age is 41.59 ± 9.652. Despite all of the challenges and setbacks they face in business, female entrepreneurs never give up and continue to make important contributions to their families, the nation, and local governments. The nature, role, and characteristics of female entrepreneurs; the ways in which political and economic developments have aided in the formation of women-owned businesses; the types of enterprises in which women are involved; the sources of funding and other resources; the challenges that women face in the business world; the lessons learned from past mistakes and the keys to future success; and the challenges that lie ahead are just a few of the topics this paper will cover.

Oni (2012) investigated the effects of entrepreneurship education and training on female entrepreneurs in Gombe State. The study employed a survey technique to gather data from a sample size of 277 female entrepreneurs in Gombe State. The data was analyzed using SPSS (Statistical Package for Social Sciences) version 20. The results demonstrated that female entrepreneurs benefited from entrepreneurship education and training. The research recommends that the government, non-governmental organizations, and social groups should increase their contributions to women's empowerment,

education, and training since they are critical to unlocking the latent potential of outstanding women entrepreneurs.
Njoroge and Gatungu (2013) investigated the effect of entrepreneurial orientation on the prosperity of women-owned and run companies in Somalia.The study focuses on the relationship between firm performance and innovation, risk-taking, and proactiveness.
The study used proportionate stratified random sampling to collect data from 314 women. The data, collected in May and June 2013, was analyzed using SPSS version 16.0. The findings indicate that proactive behavior (β=.272, t=4.227, p=.000), risk-taking (β=.186, t=3.066, p=.002), and innovation (β=.173, t=3.004, p=.003) all had positive and statistically significant effects on corporate success. Future research directions and their implications are further explored.

METHODOLOGY

The researcher adopted a descriptive research design. The population of this study consisted of women bead makers in Aba, Abia State estimated to be 100. The simple random sampling method was adopted for this study. 100bead makers in Aba were randomly selected as the sample size of the study. Well-structured questionnaire was used to collect primary data for this study. Simple regression analysis was used to analyze the data collected.

RESULTS AND DISCUSSIONS

Data presentation

Table 1: Distribution of questionnaire and response rate

Total copies of questionnaire	Respondents	Percentage (%)
Number returned	80	80
Number not returned	20	20
Total	**100**	**100**

Source: Field survey, 2023
From Table 1, at of 100 questionnaire distributed, 80 representing 80% were returned while 20 representing 20% were not returned.

Test of Hypotheses

Hypothesis one:
$H0_1$: Consumer orientation has no significant influence on entrepreneurial performance of women in bead making

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.909[a]	.853	.827	.51058	.990

a. Predictors: (Constant), Consumer orientation
b. Dependent Variable: Entrepreneurial performance

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	37.844	1	37.844	75.9	.013[b]
	Residual	5.996	78	.261		
	Total	43.840	79			

a. Dependent Variable: Entrepreneurial performance
b. Predictors: (Constant), Consumer orientation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.240	.335		.718	.480
	Consumer orientation	.990	.082	.929	12.049	.013

a. Dependent Variable: Entrepreneurial performance

Decision rule: If the probability of the F-statistic obtained from the result is at 5% level of significance, the study would reject the null hypothesis, H_0 and accept the alternative hypothesis, H_1.
TheF statistic with 75.9 has probability of 0.013% level of significance. Since the probability of the F statistics is below 5% level of significance, we would reject the null hypothesis, H_0 and therefore conclude that consumer orientation has a significant influence on entrepreneurial performance of women in bead making

Hypothesis two:

$H0_2$: Consumer education has no significant influence on sales growth of women in bead making

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851[a]	.725	.690	510306.67611

a. Predictors: (Constant), Consumer education

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5487138551570.236	1	5487138551570.236	71.001	.00o[b]
	Residual	2083303229429.764	198	260412903678.721		
	Total	7570441781000.001	199			

a. Dependent Variable: Sales growth
b. Predictors: (Constant), Consumer education

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6071967.840	1863963.334		.535	.012
	Consumer education	619659.628	134993.075	.851	4.590	.000

a. Dependent Variable: Sales growth

Decision rule: If the probability of the F-statistic obtained from the result is at 5% level of significance, the study would reject the null hypothesis, H_0 andaccept the alternative hypothesis, H_1.

The F-statistic with 71.001 has probability of 0.00% level of significance. Since the probability of the F statistics is below 5% level of significance, we would reject the null hypothesis, H_0 and therefore conclude thatconsumer education has a significant influence on sales growth of women in bead making.

Hypothesis three:

$H0_3$: Consumer education has no significant influence on level of patronage of women in bead making

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.816[a]	.666	.652	.63913	.504

a. Predictors: (Constant), Consumer education

b. Dependent Variable: Patronage

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.765	1	18.765	45.936	.000[b]
	Residual	9.395	118	.408		
	Total	28.160	119			

a. Dependent Variable: Patronage

b. Predictors: (Constant), Consumer education

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.512	.594		.862	.398
	Consumer education	.953	.141	.816	6.778	.000

a. Dependent Variable: Patronage

Decision rule: If the probability of the F-statistic obtained from the result is at 5% α level of significance, the study would reject the null hypothesis, H_0 andaccept the alternative hypothesis, H_1.

The F-statistic with 45.936 has probability of 0.00% level of significance. Since the probability of the F statistics is below 5% level of significance, we would reject the null hypothesis, H_0 and therefore conclude thatconsumer education has a significant influence on level of patronage of women in bead making.

CONCLUSION AND RECOMMENDATIONS

Based on the result of the analysis, the following findings were summarized thus: The performance of female entrepreneurs in the bead sector is highly influenced by consumer orientation. Consumer education has a major impact on the increase in sales of women bead makers. Consumer education has a significant impact on how much the beading business favors women. In marketplaces where competition is fierce, service providers make an effort to engage with clients because they understand the importance of enduring partnerships. Mutual learning and continuous communication are essential components of success. Customer education is said to be crucial for developing customer competence, which in turn strengthens the connection between the two parties.

A range of instructional programs, including workshops, brochures, blogs, forums, expert advice, and seminars, can be used to provide customer education. By educating customers, service providers may improve their business ties. Additionally, service providers can give technical help that fosters reliance and strengthens client loyalty. Based on the data, the study draws the conclusion that women's entrepreneurial performance in beadmaking is highly influenced by consumer orientation and customer education.

The following recommendations are put forward to help organizations.

i. In order to provide chances for co-production, the customer education necessary to improve consumer competence in a variety of products and services should be recognized and developed. In order to gain a competitive edge, businesses that see their client interactions as dynamic should create training programs to control the flow of knowledge.

ii. SMEs: Since these factors influence entrepreneurs' inventive behavior, owners should spend more on the education, training, and empowerment of their apprentices.
iii. The government ought to enact laws that would guarantee women's access to training opportunities and their ability to own and run SMEs.
iv. Lastly, in order for SMEs run by women entrepreneurs to thrive in a competitive market, they should support and participate in seminars and workshops where they may exchange, learn, absorb, and implement new business-related concepts.

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ABSENCE OF THE IMPLEMENTATION OF ANT-TRUST LAWS AND ENTREPRENUERAL DEVELOPMENT IN NIGERIAN CEMENT INDUSTRY

Nwadighoha, Emmanuel E. and Okolo, Amaka N.
Department of Marketing, College of Management Sciences, Michael Okpara University of Agriculture, Umudike.
Corresponding author: nwadighohaemmanuelephraim@gmail.com

ABSTRACT
This paper underscores the importance of the absence of anti-trust laws implementations and entrepreneurship development in Nigerian Cement Industry. The methodology adopted for the paper is the narrative-textual case study (NTCS). It is a social science research method that relies on information and data from several sources for problem identification and solving. It is in the view of the paper that, entrepreneurship development in Nigeria has been slowed down considerably due to lack of the will power to implement anti-trust regulations or its total absence in some cases. The paper's findings is that, government can use the following indexes of Anti-trust like: Merger Control (MC), Restrictive Business Practices (RBP), and Horizontal Anti-trust Agreement (HAA) to regulate business practices in Nigeria which will create conducive environments to enhance entrepreneurship development. The paper concludes that, government policies on anti-trust/ business practices should be implemented where necessary to help entrepreneurs to have a level playing ground for their business operations, this will enhance entrepreneurial development in general and in Nigerian cement industry in particular.
Keywords: Anti-trust, development, implementation, entrepreneur.

INTRODUCTION
A successful and robust economy is based on the trade policy put in place to regulate business practices at a given time both in developedand developing countries like Nigeria. Trade policy defines standards, goals, rules and regulations that pertains to trade relations between firms and countries. (Metu & Nwokoye, 2020). Trade policy provides clear rules against anti-competitive practices for the common good, and for the growth of the nation's economy. In most cases, the absence or non-implementation of these policies has limited entrepreneurial development in Nigeria.

Competition means a struggle or contention for superiority and in the commercial world, this means a striving for the custom and business of people in the market place. A free-market economy is an economic system in which the allocation of resources aredetermined by supply and demand in the markets and is directed by the government. This does not prevent or distort competition in a way that prevents the market from functioning optimally. (Jones & Sufrin, 2014).

It was in 18th century when some giants' business organisations known as "trust" came together and controlled the whole business the world can think of; like the railroad, oil, steel, sugar, sea port etc. the two most famous among the trust were the United Sates Steel and the Standard oil. They monopolized and controlled the supply of their products as-well-as their prices. (Mehta *et al.*, 2020).

One company controlled the entire industry, there was no competition and smaller businesses and people had no choice about from whom to buy and new entrepreneurs were blocked from coming in, prices went through the roof, and quality did not have priority. In the words of Mehta *et al* (2020), it was a seller's market. Business growth and development became a problem.

Nigeria as a nation, is the 12th largest crude oil producer in the world; the 9th most populous country of the world; and 2nd largest economy in Africa with earning of estimated $2.2 million a day in oil revenue (Nwokoye, 2020), one would have thought that Nigeria would have been a safe haven for entrepreneurs and business development, but the reverse is the case because of the absence of enabling laws or non-implementations as the case maybe.

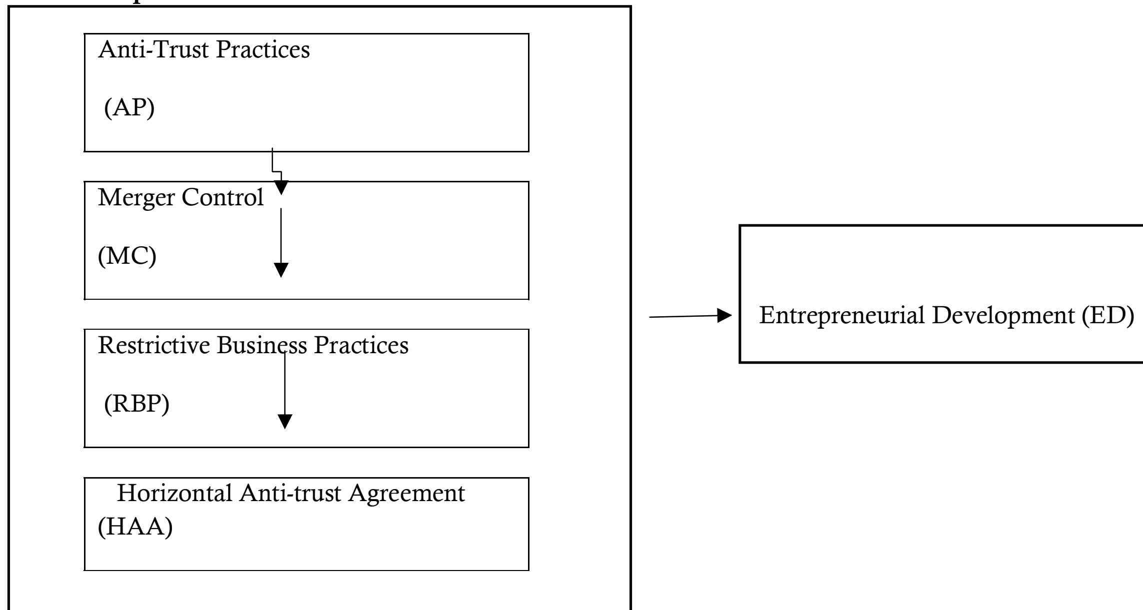
Consequently, the aim of his paper was to examine the effect of absence of the implementation of anti-trust laws and entrepreneurial development in Nigerian Cement Industry in Nigeria.

The following questions were asked in order to provide answers to the issues raised in this paper:

i. What is the effect of merger control on entrepreneurial development in Nigerian Cement industry?
ii. What is the effect of restrictive business practices on entrepreneurial development in Nigerian Cement industry?
iii. What is the effect of horizontal anti-trust agreement on entrepreneurial development in Nigerian Cement Industry?

LITERATURE REVIEW

Conceptual Framework



Source: Researcher's desk 2023.

The Concept of Anti-trust Practices:

The history of competition law can be traced to the efforts of the Roman legislators to control price fluctuation and unfair trade practices. (Wilberforce *et al.*, 1966). This was in a bid to control and protect the corn trade. Heavy fines were imposed on anyone directly, deliberately and insidiously stopping supply ships, just to influence prices.

The United States of America anti-trust law was to combat the power of the trust. At that time, it was common for stocks owners in competing companies to transfer stocks to trustees who then controlled the actions of those competitors and consequently lessened competition between them. (Isiavwe, 2015).

The pillar of a successful market economy is the trade policy put in place to protect both old and new entrepreneurs in the market. Trade policy defines standards, goals, rules and regulations that pertain to trade relations between players in the markets. Competition law is a legal framework put in place by government to regulate competitive market in a bid to ensure that firms operating in the free market economy. (Whish & Bailey, 2012).

Anti-trust laws protect competition. Free and open competition benefits consumers by ensuring lower prices and new better products. In a competitive market, each entrepreneur works hard to attract and retain customers by providing a product that will satisfy the customers. Maximization of consumer's welfare is the aim of anti-trust laws and policy, this could be achieved through the development of more entrepreneurial activities. This will help in reducing anti-trust practices both in developed and developing countries. (Osei *et al.*, 1993). This competition policy provides a level playing ground for the old and new entrepreneurs in the industry, unlike in Nigerian cement industry where only one or two are operating. i.e. Dangote Cement and BUA Cement. This has made price fixing very easy for the two, haven successfully eliminating the likes of Eagle Cement and IBETO Cement many others through anti-competitive practices. In the opinion of Oluchukwu (2020); competition laws protect consumers and create confidence in an economy. It is a signal to investors and entrepreneurs that a market is fair and open to operate. Where there are few dominating players as in the case of Nigeria, lack of regulations in the cement industry, has created outright dominance of a very few players in the industry. In television industry, DStv Nigeria

controls the pricing mechanisms, it was noted that between 2009 and 2017, they increased their price eight (8) times. (Oluchukwu, 2020). In 2021; the Nigerian House of Assembly passes a bill mandating DStv to base their charges on pay as watch bases, as the case is in other countries, but they have refused to comply because of lack of policy implementation. In the Telecom industry, MTN has been accused of undermining competition in the industry. They were on a minute bidding system before GLO Nigeria, forced them to start the per-second price bidding system. This can only happen when there is competition among the players in the industry.
In the opinion of Oluchukwu (2020), Dangote cement is said to have forced cement price up in 2017; the same cement that is sold in Nigeria for FiveThousand, Naira (£5,000.) only is sold for Three Thousand Eight Hundred Naira in Ghana (£3,800) only, for the same quantity and quality because of their strong regulatory policy. Given these reasons, there is need for open market competition that will help for entrepreneurial development in Nigerian cement industry.

Merger Control

Merger control refers to the procedure of reviewing merger and acquisition under anti-trust competition laws of a nation. The regulatory oversight for merger and acquisitions in Nigeria is vested on the Federal Competition and Consumer Protection Commission (FCCPC) by virtue of the Federal Competition and Consumer Protection Act. 2018. The work of the commission is to regulate competition and is also empowered to prevent and punish ant-competitive practices; regulate mergers, takeovers and acquisitions.A tribunal to deal with any disputes and concerns that may arise was also created.
The effect of any merger on business activities also depends on the relative effects that the barriers put in place have on the entry and exit in the market. When there are free entry and exit in the market, the merger may not enhance market power as to affect the equilibrium strategy of the merging firms, whose conduct is constrained by the constant threat of potential competitors. (Davision & Makherjee, 2020).
As a result of economic of scale, horizontal mergers often increase the overall level of static efficiency, particularly in markets with few entry restriction. A horizontal merger that reduces the total number of competitors towards the optimal level would therefore improve static efficiency. However, this does not need to be always the case as, when concentration is very high, the number of firms might be inefficiently small. (Mankiew &Whisston, 2022), and merger could reduce efficiency.
Firms use merger and acquisition as a means of engaging in anti-trust practices, especially if the merger is aimed at firms acquiring more market power to the detriment of new entrepreneurs going into the market. In this case, competition laws are aimed at establishing whether a merger or coming together of firms will result in a substantial reduction in competition in the market. Mergers that have such an outcome are normally discouraged or prohibited for the interest of new entrepreneurs to the market or approved subject to conditions that ensure minimization of damage if there are some benefits to the public in the long run, generated by such business mergers.

Restrictive Business Practices:

This the abuse of dominant market position by private or public sector producers in preventing or restricting entry of new suppliers, or otherwise restraining fair and open competition. (htts/archieve.unecwa.org.restic (04/10/2023). According to the Encyclopaedia of World Problem and Human Potentials; restrictive business practicesmeans actions or behaviours by an enterprise which through abuse or acquisition, gets a dominant position of market power, limits access to markets, otherwise unduly restrains competition, this leading or likely to lead to adverse effects on the market either local or international. It is also referring to formal or informal, written or unwritten agreements or arrangements among enterprises which have same impact. Such practices are used in order to achieve high profits, at the expense of consumers, without being exposed to competitions.
Restrictive business practices (RBPS) are of two types- anti-competitive agreement and abuses of dominance. Anti-competitive agreements can be further divided into horizontal business agreement and vertical business agreements. Similarly, abuse of dominance practices can be divided into exploitative abuses and exclusionary abuses. Cost benefits analyses are sometimes conducted on RBPS before they are prohibited.
Horizontal restrictive business practices include cartel agreements, where existing competitors fix prices and divide markets among themselves. These cartels are in different forms: domestic cartels; import cartels; international; but in all such agreements, there is a possibility of collusion tending to anti-competition practices. Cartel members also use bid-rigging to eliminate or distort competition.
Vertical restrictive business practices, involving exploitation of dominant position, includes, for example, refusals to deal, exclusive dealing, resales price maintenance. This could be where a manufacturer fixes the resale price, or tied selling; where the manufacturer focuses on the consumer, reseller or wholesaler to

purchase more goods or services at different prices to different customers, or sells goods at a loss until a competitor goes bankrupt. All these activities/ abuses/ takeovers are used to create monopoly or dominant positions.

Horizontal Anti-trust Agreement:

Horizontal Ant-rust Agreements are type of agreements between competitors that operate at the same level of the production/distribution chain. Horizontal agreements that have as their objective or effect or likely effect of the prevention, distortion or restriction of competition directly or indirectly constitute per se violations.The most significant and common types of ant-competitive horizontal agreements include price fixing, bid-rigging, market allocation/sharing and refusal to deal or group boycotts. Such horizontal agreements usually take the form of a cartel exchanging a competitive sensitive information that may be against other competitors.

Horizontal anti-trust agreements or Cartels have traditionally been considered the most damaging of all anti-trust practices and therefore are most susceptible to punitive action. Cartels seen in the Nigerian oil industry are arrangements among firms that produce and sell the same product for the purpose of exacting and sharing monopolistic profits from the people build blocks against new entrepreneurs not to come in. ie. NNPC/SHELL/AGIP joint venture.

Most commonly, they accomplish this by agreeing on a relatively high benchmark price for their products that none of the member firms are permitted to underbid. Price fixing cartel divides the market by geographical territory or customer segments and granting each other monopoly power in separate localities/segments. Customer sharing cartel, agreeing to restrict outputs (output restriction cartel) or conniving on tending bids (bid rigging), etc.

Vertical arrangement which also come under competitive spurting, are usually contractual arrangements between suppliers (manufacturers) and distributors (retailers), which extend beyond simple arms-length pricing. They are usually motivated by the desire for vertical control within a principle- agent relationship, where the principal obligations on its agent (the retailer) when delegating responsibility for selling its goods. His includes price maintenance (where a manufacturer and its distributor agree that the latter will sell products at or above/below a price flow.

Trade Policy in Nigeria:

The agency in charge of trade policies in Nigeria is the Ministry of Industry, Trade and Investment. The body is to formulate and implement the trade policy, she has about 23 ministries, departments, bodies and agencies that work in collaboration. They are also, involved in export and import procedures. The enlarged National Focal Point on Trade (ENFP), which was created in mid- 1990's, and subsequently strengthened in 2001. It consist of all the Standard Organisation of Nigeria and National s Agency for Food and Drug Administration and Control; Nigerian National Petroleum Corporation; Nigerian Police Force; Nigerian Bar Association, all Chambers of Commerce; and Private Sector groups and Export Promotion Agencies. Others are the Federal Ministries of Health; works. Housing and Urban Development, Science and Technology, Youth development; foreign Affairs and Tourism.

The ENFP was tasked to review Nigeria's trade policy in 2012, the Trade Negotiating Committee and Trade policy Advisory Committee. This committee provides technical support and policy and advocacy for international trade negotiations.In all these policies and frameworks, Nigeria is yet to be at her best in the implementations of anti-trust laws.

Competition law has been argued to be a good thing, in fact, competition law is necessary in a developing economy like that of Nigeria, also part of any liberalization programme. (Dimgba, 2014). Countries like Nigeria which over the past years has committed herself to market liberalisation, through privatisations and deregulation of various sectors of the economy, does not have a competition law, they might unwittingly end up creating new dangers for the entrepreneurial development in the country (Dimgba, 2014). The case of Nigerian refineries was stated thus by Dimgba (2014), as we all know there are four refineries in Nigeria: Eleme, Port Harcourt, Warri and Kaduna. The Bureau of Public Enterprises (BPE) transferred two of the major refineries (Port Harcourt and Kaduna), together with their shares close to sixty percent of the petroleum refining market to one single entity, even when there were other entities interested.

It should be stated, in relation to privatisation programme, that in the absence of substantive completion law in Nigeria, there is also a deficit in the entrepreneurial development of the economy.

Concept of Entrepreneurial Development:

The dynamics of the global economy have changed in the last few decades with South-East Asia and Latin America becoming dominant in the world market as it concerns exporting of manufactured goods. This is because of these countries encourage entrepreneurship policies in the form of tax holidays, soft credit

facilities and other incentives in the new and old entrepreneurs. Domestic entrepreneurshipcontributes to the development of the economy through creation of employment opportunities. (Metu &Nwokoye, 2004). Entrepreneurship is derived from French word *entreprendre,* which means to understand. Hence, it is the process of understanding activities concerned with identifying and exploiting business opportunities while assuming the attendant risks involved. (Matu & Nwokoye; 2014). According to Engelhoff (2005), entrepreneurship involves taking chances, because new business do not emerge by accident. It is a human activitywhich plays a major role in any economic development. (Metu & Nwokoye; 2014). Onuoha, (2020), states that, entrepreneurship is the ability to use the factors of production- land, labour, and capital to produce new goods and services. Wilken (1979) opined that; entrepreneurship involves coming to initiate changes in production. It has been noted that, strong entrepreneurial bases are essential drivers of economic growth and prosperity in a modern economy. (Okonnkwo, 1996; Okonjo-Iweala, 2005; Ewuurum&Ekpunobi; 2008).

Nigeria is the 12th largest crude oil producer in the world, the 9th most populous country in the world. It is the largest economy in Africa with earnings of an estimated $2.2 million a day in oil revenue (Nwokye*et al,* 2013). Nigeria has no functional refinery for years as she depends on imported products for her citizens. The country is a mono-product economy, her dependent on crude oil which accounts for up to 90% of her foreign exchange earning has not enhanced entrepreneurial development. Nigeria is endowed with a large agricultural potential, given that more than 70% of her land is arable. Nigeria is still one of the poorest nations of the world, it industrial sector which is expected to create job for the youths is not, because of lack of entrepreneurial development. His could be traced o lack of enabling laws by the government.

Nigeria needs to put attention from relevant authorities, to help the development of all business sectors. Domestic entrepreneurships contribute o the economic and social development through creation of employment opportunities. Entrepreneurs are very important in any country because they have effect on the world economy in general. (Wickham, 2004). Research findings and empirical evidences show that poverty reduction is significantly possible in countries where entrepreneurship is encouraged. (Chibundu, 2006; Nwokoye *et al*, 2014).

Challenges of entrepreneurial development in Nigeria:

Entrepreneurship is one of the essential pillars onto which most economies of the world are built. Entrepreneurs play a huge role in a country's trade balance, job creation /employment and tax generation to the government. In Nigeria, like any other developing country, entrepreneurs face numerous challenges: some relate o factors beyond their control and some not.

In developing countries like Nigeria, the entrepreneurial scene is remarkably different from those of the developed world, like Europe and America. Some of the challenges entrepreneurs have in Nigeria could be like; non-implementation of policies that could give a level playing ground to business operators. Capital problems, due to high interest rates by banks, unstable nature of naira as compare to dollar and other currencies in the global market. Insufficient business knowledge, before venturing into the market, poor infrastructure, multiple taxations, transportation, impatience and government inconsistency in their policies.

Theoretical Review

We adopted the dynamic effects of anti-trust policy on growth and welfare of Cavenaile (2021). In his work; the equilibrium model with Schumpeterian innovation, oligopolistic product market competition and endogenous decisions. The estimated model reveals that:

- Existing higher gains in growth and welfare.
- Strengthening higher gains for new entrepreneurs
- The dynamic long – run effects of anti-trust policy on social welfare are on order of magnitude larger than the static gains from higher allocative efficiency in production.

METHODOLOGY

We adopted narrative-textual case study (NTCS) as our method of investigation and inquiry in this paper. This method is a social science research method that relies on information and data from several sources for problem identification and solving. According to Gilgu (1994),it is a research instrument that is used for the in-depth study various social and clinical problems, to understand stages or phases in processes, and to investigate a phenomenon within tis environmental context.

CONCLUSION AND RECOMMENDATION

The Nigerian government has put-up a number of polices and frameworks that could have helped in entrepreneurial development in the country if they have been properly implemented. The policy papers are

well articulated, waiting for the will-power to implement them. The anti-trust laws must be implemented now or never as their absence has caused more harm than good in business development in the country. These implementations must be without looking at political and ethnic affiliations, as this will make an average entrepreneur to have confidence in the system that he will have a level playing ground to do business. The paper therefore recommends the followings:

i. Anti-trust policies should be properly identified and implemented for entrepreneurial development.
ii. Merger control could be used to check-mate unscrupulous businessmen to avoid anti-competitive practices.
iii. Government as a regulatory agency can use restricted business practices as an ant-trust measure in entrepreneurial development.
iv. Horizontal anti-trust agreement also could be used to check-mate anti-trust practices which will enhance entrepreneurial development.

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SOCIAL NORM AND YOUNG CONSUMERS' ATTITUDES TO ORGANIC FOOD CHOICE BEHAVIOUR: ATTITUDE DIMENSION

[1]Oloveze, A. O., [1]Oteh, O. U., [1]Ollawa, C. C. and [2]Ogbonna, C.
[1]Michael Okpara University of Agriculture Umudike
[2]Nnamdi Azikiwe University, Awka Anambra State
Corresponding author: oloveze.ambrose@mouau.edu.ng

ABSTRACT

The notion of organic food has been increasingly adopted in developed countries such that there are existing developed organic markets. Markets for organic foods in developing nations like Nigeria are non-existent despite the youthful population that is educated and estimated to be growing rapidly. The study considered social norms and dimensions of young consumers' attitude to organic food choice behavior following the generalisation of studies on consumer attitude and dearth of literature on social norm as a dual influence. Samples were drawn from postgraduate students in Abia State using purposive and snowball sampling approach. Confirmatory factor analysis was undertaken to check the reliability and validity of the instrument while a set of model indicators were adopted to assess the model. In analysing the hypotheses, structural equation model through statistical significance and maximum likelihood approach were adopted. The findings revealed that social norm performs a dual role on young consumers' organic food choice behavior with the strongest influence being the indirect path to affective element. With the various dimensions of attitude, conative element has the strongest effect on young consumers' organic food choice behavior. The implications border on theoretical contribution such as the dual function of social norm and practical contributions in the society. It is recommended that focus should be directed on policy making and programmes that seek to engage young consumers in production of organic food and consumption given the estimated population growth in Nigeria and the potential it has on businesses.
Keywords: Consumer attitude, social norm, social marketing, organic food, young consumers

INTRODUCTION

The perspective of consumers being averse to organic food because of associated constraints is documented in literature (Iqbal, 2015; Hsu & Chen, 2014). The older consumers possess lesser propensityto organic food consumption compared to the younger consumers (Wier et al., 2005). Though there are contrasting evidences on the difference in patronage between older consumers and younger consumers; in some other instances the classification of young consumers and older consumers vary significantly. For instance empirical evidences suggest that younger consumers go for organic food than the elderly ones (Onyango *et al.* 2007; Wier *et al*., 2005; Wier & Calverley, 2002; Bryla 2016) while others argue that the older consumers have more preference for organic food (Waqas & Hong, 2019; Mohamad *et al*., 2014). Though, this is not the scope of the paper, the understanding is that the differences between older and younger consumers' patronage of organic food are contextual, environmentally influenced, and influenced by knowledge, education and type of organic food sought by the consumers. Therefore,more developed economies like UK have established markets for organic foods (Wier 2005) with organic food consumption advancing rapidly (Srinieng & Thapa, 2018) but the developing nations such as Nigeria have markets for organic food that are non-existent (Global Alliance for Improved Nutrition, 2014).

There is an increasing awareness of organic food in Nigeria (Ewepu, 2021).This could be attributed to the concept of sustainable consumption (Oloveze*et al.,* 2023) particularly on unsustainable consumption and production (Mont et al., 2022) and mismatch between consumption and poor regeneration of resources (Vergura et al., 2023). Nonetheless, the rising hunger and malnutrition (Oteh *et al*., 2023; Osabohien, 2023), need for eco-friendly and sustainable food production (Katt & Meixner, 2020), increasing awareness of the need for organic food (Bello & Abdulai 2018) and consumers desire for organic foods (Bello & Abdulai 2016) have impacted consumers' knowledge of organic foods. This is evident from the increasing global trade on foods that are organically produced (International Federation of Organic Agriculture Movements (IFOAM), 2017; Akinwehinmi *et al.* 2021). The patronage and consumption of organic products was insignificant at the early emergence of the call for the consumption of organic food. The producers of organic food items are small (Iqbal, 2015), while the rate of demand was slow at the early stage following poor facilities that hindered its growth (Hsu & Chen, 2014). Presently, the rising growth of organic food consumption is attributed to sustainability index (Acee-Eke & Ikegwuru, 2020).

In Nigeria, the food market has an estimated 12.75% growth rate with about US $1,042 revenue generation per person to total population and 186.60kg estimated average volume per person (Statista, 2023). Young consumers constitute the greatest population of the country (Thisdaylive 2023; McCrocklin, 2018). However, younger consumers' drive for organic food in Nigeria could be traced to the youthful population and education as Statista Research Department (2022) asserts that Nigeria's young population that is educated constitutes about 68%. The implication is that the actions of this group of consumers will probably have grave consequences on sustainable consumption, sustainability and health of the nation. With the imminent ageing of the young consumers there is a huge potential for increase in buying power thereby emphasizing positive growth trajectory for businesses to consider (McCrocklin, 2018). This portends great business for organic producers and businesses that market organic products. It is more attractive given the long-term forecast that projects the population to continue rising to about 411 million in 2050 (Enoghase, 2018).

With extant literature confirming the existence of some challenges onthe patronage of organic foods, the dimension of attitude that is attributable to their action has been elusive in literature. Firstly, the challenges emanate from the premium prices charged for organic food to which consumers consider to be expensive (Akinwehinmi et al. 2021). Further, the existence ofpoor knowledge on the difference between the organic foods and the traditional foods (Iqbal, 2015), almost non-existent and unorganised local market for the organic food (Global Alliance for Improved Nutrition, 2014), and the existence of poor incentive to producers to embark on the organic farming and production (Akinwehinmi *et al*. 2021) impacts the patronage of organic foods.Secondly, extant studies have confirmed the influence of consumer attitude on consumer behavior with respect to the young consumers' disposition to the organic food (Nam & Nga, 2016), the nature of consumer demand in the mature organic food market(Wier *et al*., 2005), and consumer behavior to the organic food (Iqbal, 2015). However, the aspect of young consumers' attitude to the organic food choice behavior is yet to be established in literature particularly from the dimensions of consumer attitude.

Thus, the present study considers the dimension of attitude that influences young consumers' organic food choice behavior. The result of the study will enable deeper understanding of the different attitudinal influences and how social norms can be used to influence consumer attitude to organic food consumption. Therefore, the drive to fill the gap in literature is anchored on a three layer model that flows from the social norm, to the attitude and the food choice behavior. The social norm was integrated in the study to determine its level of influence on young consumers' attitude and the level at which it could be required to elicit a possible change. This is significant because from the context of social marketing, the drive is to affect behavior either to be consistent as preferred, change to a better desired option using incentives or de-motivate unacceptable behavior through penalties and other structured methods.

LITERATURE REVIEW

The concept of organic food deals with foods that are not genetically modified (Hsu & Chen, 2014). The understanding is that they are healthier foods to consume thanthe inorganic foods. It is defined as "item for consumption which are "grown without the use of pesticides, synthetic fertilizers, sewage sludge, genetically modified organisms, or ionizing radiation" including products manufactured "free of antibiotics or growth hormones"(Dahm *et al*., 2009). Basically their production is entirely anchored on eco-friendly practices. Their demand is increasing after being almost nonexistent at the early stage. Some of the factors attributed to the increase in the developing countries are the concerns on food safety (Hsu et al., 2016), environmental concern (Nandi et al., 2016), rising population that impacts food security (Acee-Eke & Ikegwuru, 2020), and consumer affluence and education (Iqbal, 2015). With the increase in demand, studies suggest that the attributes considered by the consumers vary from the nutritional content, naturalness, producer's logo and price (Grzybowska-Brzezińska, 2017), safety, environmental sustainability, quality, and healthiness (Lamonaca *et al*., 2022). In essence there are varying motivations for consumers to move for the organic food.

Studies have approached organic food choice from different perspectives. Acee-Eke and Ikegwuru (2020) examined the consumer intention for organic food products in Nigeria using the hierarchy of effects model and adopting a structural equation model (SEM). The concern for food safety, environment and health consciousness were the key variables that motivate the intention to purchase organic food. Similar study that focused on young consumers in Malaysia identified the same variables including affordability to be significant in young consumers' purchase of organic food. Nam and Nga (2016) used SEM to identify environmental attitude and concern to have direct and indirect effect on purchase of organic food. The consumers' personal and situational factors were adopted by Nguyen et al. (2019) to examine attitude and

purchase behavior to organic meat and argued that knowledge, consumers' concern for health, safety of food impacts their attitude to organic meat. The idea of personal values and attitude of consumers to organic food purchase was examined by Mainardes *et al.* (2017) with the results indicating that consumers' conservatism, self promotion and openness to organic behavior was influenced by consumer values. Iqbal (2015) used SEM to examine consumer behavior to organic food in developing country by analyzing the demographic variables, consumer concern on healthiness and eco-friendliness of organic fruits and vegetables and their tasty nature. Healthiness, tasty and eco-friendliness of organic products were the significant factors that impact consumer behavior. The contexts of these variables were based on peculiarity of the problems. Consequently, the context of studying consumer attitude to food choice behavior is significant as Oloveze *et al.* (2021) asserts that the attitude of consumers often reflect in consumers' like or dislike.

Thus, Ajzen and Fishbein (1980) theory of reasoned action (TRA) was used to access the consumer attitude to food choice behavior. The theory suggests that as consumers examine the attitude that is suggested to them; and have thought about others wanting them to perform behavior, that the intention is higher thereby leading to behavior. However, it is argued that intention does not always lead to the performance of actual behavior. Therefore, the key variables of TRA are consumer attitude, subjective norm and behavioral intention. In the present study, the dimensions of attitude were considered to elicit the key attitude that impacts young consumers' food choice behavior to organic food while the subjective norm was examined as a factor with dual influence particularly on consumer attitude and organic food choice behavior.

Social Norm (SN)

The concept of social norm focuses on the belief that a consumer has about others in his/her life in adopting behavior (Ajzen & Fishbein, 1980; Oloveze *et al.,* 2021). Social norm exists when a consumer adopts behavior because of others' expectation or for them to be accepted or liked. It is helpful in shaping behavior when they believe that acting in a given way makes them feel acceptable. This includes the impact of injunctive norms (which focuses on what a consumer ought to do) and descriptive norms (which focuses on what majority of others do) (Stibe &Cugelman, 2019). In other instances, it is argued to comprise of belief and motivation that is influenced by referents (Ramos-de-Luna *et al*., 2019; Oloveze *et al*., 2021) to which the references could be family and friends, peers, role models and other third parties that are capable of influencing their behavior. It is more important in situations where there is probability of the consumer having poor knowledge and education about the new idea. Also, it can be important in a culture that values socialization and social values.Extant studies have examined its impact on consumer behavior (Oloveze *et al*., 2021; Ramos-de-Luna *et al.,* 2019), consumer purchase intentions to organic food (Cheng *et al*., 2023) and consumer attitude (Wang *et al*., 2023; Wang & Wong, 2021). Thus, it is posited to have a dual effect in organic food choice behavior; as a direct effect on food choice behavior and an indirect effect on food choice behavior. Therefore, the authors propose the following hypotheses:

H1: Social norm is related to the cognitive aspect of the consumer attitude

H2: Social norm is directly related to organic food choice behavior

H3: Social norm is related to the affective aspect of the consumer attitude

H4: Social norm is related to behavioral intention in organic food choice

Consumer Attitude

The concept of attitude involves the consumers' evaluation of behavior being good or bad and adoptable or not (Wang et al., 2022). It can be evident through the display of like and dislike, and favorable and unfavorable. It has the propensity to dictate the consumers' response pattern to an object. Studies have viewed it from the perspective of collective element though it is also indicated in literature to have three key dimensions or aspects. These dimensions include cognitive element, affective element, and conative element (behavioral intention) (Jain, 2014; Schiffman & Kanuk, 2004). The dimensions of attitude have been evaluated in earlier literatures (Lutz 1991; Eagly& Chaiken, 1993). As a compound element, it is concluded in extant literature to influence behavioral intention (Oloveze*et al*., 2022) while in organic food studies it is suggested to positively impact purchase intention (Wibowo *et a*l. 2022; Sarabia-Andreu & Sarabia-Sánchez (2018).

Cognitive Element

The concept of cognitive dimension of consumer attitude is related to the information that the consumer is able to get about the object that needs attitude formation and belief (Ajzen & Fishbein, 1980). In other words, it is the consumers' information storage room where the information about the object is organized. It includes the consumers' thoughts and beliefs regarding an object. According to Jain (2014) it deals with the evaluative action that is undertaken by the individual on an object which leads to the formation of

opinion in form of belief or disbelief. The information gained about the object requires the consumer to be directly involved thereby leading to the consumers' experience while indirect experience is associated with the object (Simmons & Lynch, 1991). In essence, consumers with the direct involvement or experience in organic food consumption are more likely to adopt than ones without the direct experience. Therefore, the authors propose the following hypothesis:

H5: Cognitive aspect of consumer attitude are related to organic food choice behavior

Affective Element

The concept of affective dimension of consumer attitude is anchored on the emotions of the consumer which could be on experiences or preferences (Eagly& Chaiken, 1993). The emotional response can be expressed in form of like or dislike to an object. The emotion is sometimes subjected to evaluative judgment to form attitude to an object (Jain, 2014). The affective dimension can be positive or negative but the key factor is that it emanates from experience. According to Kwon and Vogt (2010) the positive aspect deals with delightedness while the negative aspect deals with experiences of anger. The authors argue that when the affective dimension is positive, the consumers will favor behavior but when the affective dimension is negative, the consumers will react unfavorably to an object. Therefore, the following hypothesis was formulated:

H6: Affective aspect of consumer attitude are related to organic food choice behavior

Behavioral Intention (Conative Element)

The behavioral factor is the most studied of the three dimensions of consumer attitude. It is the conative dimension of the attitude. The concept of behavioral intention or conative aspect includes all verbal and non-verbal actions performed by the consumer as related to the object of attitude (Eagly & Chaiken, 1993).This can be seen through the consumers' favorable or unfavorable response to act in way towards an attitude object. Thus, there is existence of critical involvement of the consumer that is expressed on interest terms as related to a particular object (Kwon & Vogt, 2010). It is often evaluated as a direct link to consumer behavior. Therefore the authors propose the following hypothesis:

H7: Behavioral intention is directly related to organic food choice behavior

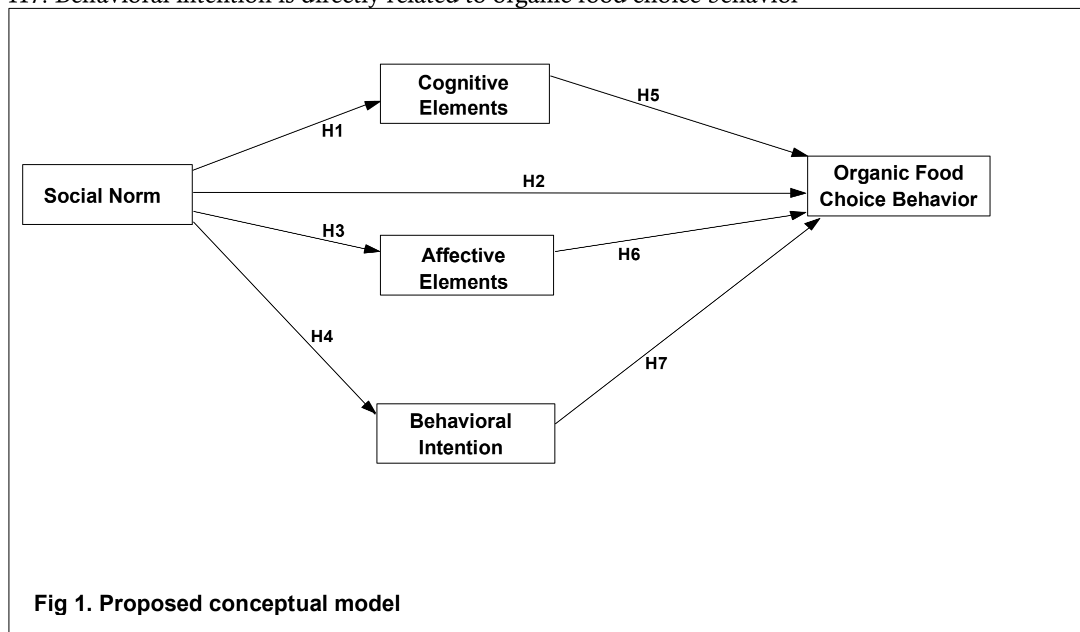

Fig 1. Proposed conceptual model

METHODOLOGY

The items in this survey were adapted from related literature.The preliminary assessment of the items was duly carried out using face validity. The adapted items have four items each except the organic food choice behavior that was measured using 3 items. The structured questionnaire was measured on 7 point Likert and administered on the postgraduate students in Abia State, Nigeria through online Google form. Specifically, purpose sampling and snowball sampling technique was adopted in the administration of the questionnaire that was designed on Google form. A filter question was used to ensure that the respondents meet the criteria: I have heard or have knowledge of organic food.Confirmatory factor analysis was used

in executing the reliability and validity of the research instrument. At the end of the data collection, 305 forms were administered. 228 forms were useable after screening out 77 inappropriate forms thereby representing 74.8% valid responses. The demographic profile revealed 69% male participation in the survey and 31% female representation in the survey. With reference to the age of the participants, 23% were below 28 years, 57% of those within 28-38 years participated in the survey, while 20% of those within 39-49 years were the least that participated in the survey.

Table 1. Measurement reliability and validity

Variable	Item	Factor Loads	Cronbach α	Composite reliability	Average variance extracted
Affective Element	AE1	.654	0.707	0.786	0.553
	AE2	.753			
	AE3	.815			
Cognitive Element	CE1	.912	0.957	0.924	0.858
	CE2	.940			
Behavioural Intention	BI1	.938	0.965	0.938	0.883
	BI2	.941			
Social Norm	SN1	.859	0.927	0.899	0.748
	SN2	.866			
	SN3	.870			
Organic Food Choice Behavior	OFCB1	.881	0.972	0.916	0.784
	OFCB2	.886			
	OFCB3	.889			

Source: Authors Computation, 2023

To justify the data for analysis and structural equation modeling (SEM), factor analysis was conducted through SPSS v23. The items that were below 0.6 were dropped and this includes affective element4 (AE4), cognitive element3 (CE3) and 4 (CE4), behavioral intention3 (BI3) and 4 (BI4), and social norm4 (SN4). The dropped items were below the recommended threshold of 0.6 in literature. The measurement of cognitive element and behavioral intention with two items were justified from suggestions in literature.

According to Yong and Pearce (2013) two items could be retained where both items have r>0.70. The items of both variables had r values above r (Cognitive element: r=0.93; Behavioral intention: r=0.92). The sampling adequacy was checked using Kaiser-Meyer-Olkin. With value of 0.877, the sampling adequacy is justified. Bartlett's test of Sphericity was used to investigate the null hypothesis of no difference between the correlation and identity matrix. At 3693.499 and p=0.000, the null hypothesis was rejected thus confirming no difference in variance.

RESULTS AND DISCUSSION

The reliability checks were specifically examined through the Cronbach Aphavalues and the composite reliability values on table 1. The thresholds are 0.6 and 0.7 in literature (Hair *et al*., 2006). Therefore, the internal consistency of the items was confirmed given that each of the variable's reliability score exceeded the minimum threshold. The validity of the instrument was examined through the average variance extracted (AVE) and convergent validity. The AVE minimum threshold is 0.5 (Fornell & Larcker, 1981) which is satisfied as indicated on Table 1. The convergent validity was assessed through the loadings following the recommend 0.6 value point recommend by Bagozzi and Yi (1988) in literature. With all the factor loads on table 1 exceeding the threshold, the validity of the instrument is confirmed.
On the other hand, the goodness of fit of the structural model was examined using different indices as revealed on table 2. With the recommended values as referenced on table 2 against the values in the model, the structural model was confirmed to be a good fit. Secondly, the R^2 value of 0.702 suggests that the explanatory variables accounts for about 70.2% variance in food choice behavior.

Table 2: Model fit indices

Fit indices	Recommended value	Value in the model	Reference
$\chi^{2/df}$	<5	1.698	Bentler and Paul (1996)
RMSEA	<0.08	0.055	Hu and Bentler (1999)
CFI	>0.90	0.999	Bentler and Paul (1996)
TLI	>0.90	0.993	Schumaker and Lomax (2016)
SRMR	<0.08	0.017	Pituch and Stevens (2016)
PClose	>0.05	0.312	
Overall R^2		0.702	

Notes: RMSEA = Root mean squared error of approximation. CFI = Comparative fit index. TLI = Tucker-Lewis index. SRMR = Standardized root mean squared residual.

The study sought to examine the social norms and dimensions of young consumers' attitude to organic food choice behavior. Using a three layer model through SEM, the items were subjected to reliability and validity assessments for appropriateness. Generally, all the hypotheses as indicated on table 3 and figure 2 were significant except H6 thereby confirming the significant effects of the variables on young consumers' organic food choice behavior.
The social norm was confirmed to have a dual effect on organic food choice behavior of young consumers. H1, H2, H3, and H4 were formed from social norm. The indirect effects were confirmed (H1: β=0.332, $p \leq 0.000$), (H3: β=0.792, $p \leq 0.000$), and (H4: β=0.358, $p \leq 0.000$). Similarly, the direct effect was also confirmed (H2: β=0.307, $p \leq 0.000$). Generally, the results were consistent in literature in studies assessing direct effect of social norms on attitude in organic food (Wang et al., 2023; Wang & Wong, 2021) and on studies that evaluated the path to consumer behavior in studies unrelated to organic food (Oloveze et al., 2021; Ramos-de-Luna et al., 2019).On the other hand, the consideration of the dimensions of attitude was specifically on H5, H6 and H7. The result revealed that only cognitive element (H5: β=0.196, $p \leq 0.004$), and behavioral intention (H7: β=0.595, $p \leq 0.000$), directly influence organic food choice behavior following the results on table 3 and figure 2.

Table 3: Hypothesized relationships

Hypotheses	Std. β	S.E	Z	*P*	Decision
H1: Social Norm→Cognitive Element	0.332	0.06	5.82	0.000	Yes
H2: Social Norm→Organic Food Choice Behavior	0.307	0.05	6.06	0.000	Yes
H3:Social Norm→Affective Element	0.792	0.02	38.75	0.000	Yes
H4: Social Norm→Behavioral Intention	0.358	0.06	6.42	0.000	Yes
H5: Cognitive Element→Organic Food Choice Behavior	0.196	0.07	2.91	0.004	Yes
H6: Affective Element→Organic Food Choice Behavior	-0.071	0.05	-1.47	0.143	No
H7: Behavioral Intention→Organic Food Choice Behavior	0.595	0.07	8.97	0.000	Yes

Source: Authors Computation, 2023

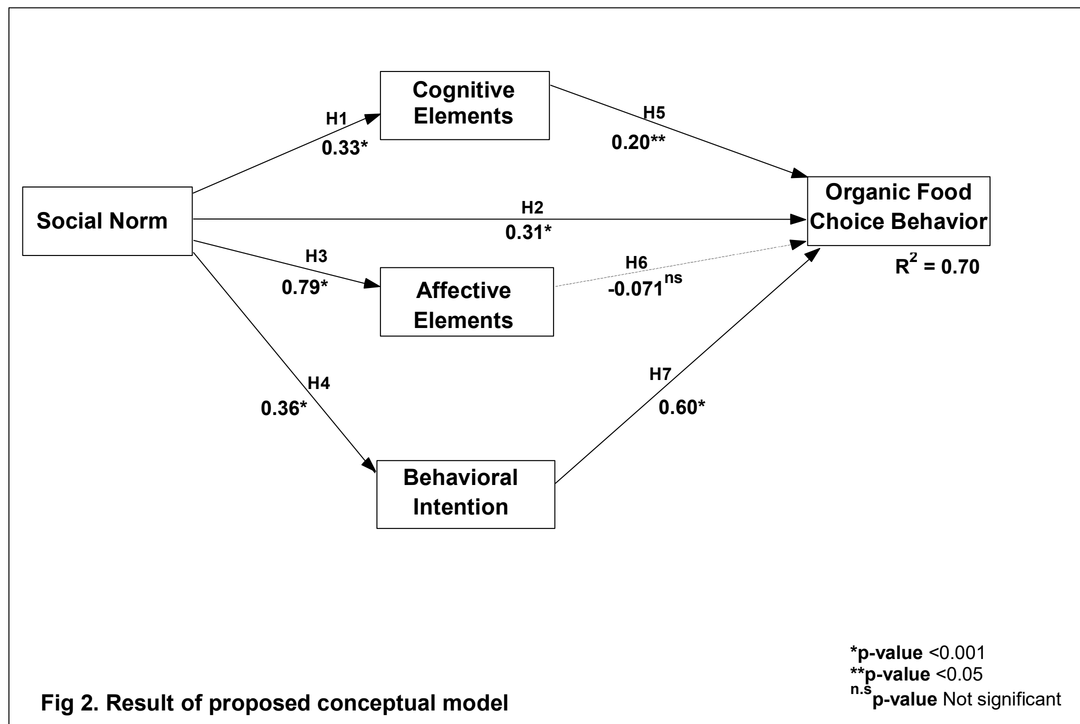

Fig 2. Result of proposed conceptual model

CONCLUSION, IMPLICATION AND RECOMMENDATIONS

Theoretically, the study revealed a three-way model approach to studying food choice behavior using the dimensions of consumer attitude and social norm. Social norm is a strong indicator of food choice behavior among the young consumers. The influences are either direct or indirectly through the referents in the young consumers' lives. The strongest influence of social norm is the path to affective element thereby justifying the argument on affective elements of consumer attitude being combined with others in consumers' evaluative judgment of an attitude object (Jain, 2014). With respect to the attitudinal dimensions, it is theoretically revealed that only cognitive elements and conative elements (behavioral intention) can influence young consumers' organic food choice behavior. However, conative element has the strongest direct influence on young consumers' food choice behavior. This justifies the essence of the involvement and the importance of consumers' favorableness to an attitude object.

However, from the practical dimension, it is imperative to consider the social structure of the society and utilize the influence it has on consumers. The role of celebrities on influencing consumers has being documented in literature (Oteh et al., 2023). The utilization of the young consumers' affinity and closeness to role models and celebrities are indicative of directions to follow in ensuring improvements on young consumers' organic food choice behavior. Further, the youthful population, and projected increase by 2050 implies that organic farmers, producers, marketers and distributors have verifiable market segment that is

projected to thrive with time. Therefore, it is a pointer on where to invest resources for businesses. On the other hand, the importance of focusing attention on the verbal and non verbal actions of the young consumers is vital to improve their organic food choice behavior. The implication is that healthy youth can equate to healthy population and productive segment of the population. So, with further attention on the young consumers, focus should be directed to the means of involving them in eating organically, farming and producing organically and the ways of eliciting their interest further. In this way, strategic communications can be adopted as a means of improving awareness, knowledge and their engagement in organic foods.

In conclusion, social norms are critical in impacting young consumers' food choice behavior either directly or indirectly while the cognitive and conative elements of consumer attitude are important dimensions of consumer attitude that are capable of eliciting positive actions of the young consumers to organic food behavior.

Guided by the results from the study, it is recommended that the communications that utilizes the abilities and skills of celebrities should be adopted in communicating organic consumption and lifestyle to young consumers. This is going to help deepen influence and patronage of organic food or products by the young consumers. Further, the implication of social norm implies that peer pressure, family and friends can play significant role on young consumers' organic food behavior. In this context, policies and programmes that have attractive incentives can be designed to encourage the young population to engage in the production of organic foods and consumption of organic foods.

The study has few limitations such as the concentration of the study on postgraduate students in Abia State and the use of cross sectional study which is affected by time. Further, the study assumed that the young consumers in Nigeria are all educated. Therefore, future studies can increase the sample size by involving the educated and uneducated young consumers while an attempt at longitudinal survey will help in confirming the robustness of the findings.

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IMPACT OF SERVICEASSURANCEON CONSUMER SATISFACTION OF EATERY CENTRES IN THE SOUTHEAST, NIGERIA

[1]**Obasiabara Beatrice O. &[2]Aniuga Chukwuma**
[1]Ebonyi State University, Abakaliki, Ebonyi State, Nigeria
[2]Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria
Corresponding author: beatriceorieomaobasiabara@gmail.com

ABSTRACT
The major aim of the service providers is the same to physical products producers, that is, to develop and provide products that lead to the satisfaction of customer needs, thereby ensuring their own economic survival. To achieve this objective, service providers will need to understand how customers evaluate the quality of their service offerings, how they choose one organization in preference to another and on what basis they give their long-term support. Assurance is defined as employees' knowledge, courtesy, and the ability of the firm and its employees to inspire trust and confidence. This dimension is likely to be particularly important for services that customers perceive as high risk or for service of which they feel uncertain about their ability to evaluate outcomes. This study examined the impact of service assurance on consumer satisfaction of eatery centres in the south east**,** Nigeria. The objective was to examine the impact of assurance on consumer satisfaction of eatery centres in the South East, Nigeria. This study adopted the descriptive survey design. Out of 365 respondents that participated in the survey, only 295 copies of questionnaire were valid for final analysis. The questionnaire was designed in 5-point Likert Scale and validated. The research hypothesis was analyzed using simple linear regression with the aid of Statistical Package for Social Science (SPSS). This study revealed that assurance one of the dimensions of service quality has positive influence at 1% level of significance on customer satisfaction. The answer to research hypothesis above is that the quality of service plays a key role in determining customer satisfaction. It is therefore important for the eatery providers to understand the expectations and perceptions of their customers. The finding of this study indicates that the customer perceives assurance to be the most important driver of service quality and customer satisfaction therefore, eatery providers should leverage this dimension as a way of ensuring that their customers get the satisfaction, they expect in the services offered. Based on the result of this study, it was recommended that service providers of eateries in the southeast, Nigeria should always emphasis and improve on this aspect of dimension of service (assurance) quality, since it has shown that itleads to an increase in the consumers' satisfaction. The marketing implication of this finding is that customers are satisfied with timely response to orders as well as the service providers' ability to portray a feeling of consistency with the services rendered.
Keywords: Service Assurance, Consumer Satisfaction, Eatery Centres, South East, Nigeria

INTRODUCTION

In today's ever dynamic competitive environment, firms are losing significant number of their customers not because of the price they offered to those products but the quality of the product or not delivering quality service. Particularly in service giving organization, delivering high quality service is vital for their continued existence (Tesfaye, 2015). All over the globe, there is rapid rise in demand for food away from home because of increase in the incomes, changes in consumption pattern, changes in family composition, and the time pressures created by dual working families (Nwokah, 2018). The food service industry has become highly competitive as the number of food service outlets has increased to meet the demand. In order to succeed in such a competitive industry, restaurant operators need to understand the factors that influence restaurant patronage decisions (Nwokah, 2018) and in turn leads to customer satisfaction. From the foregoing, it becomes obvious that in a highly competitive restaurant industry, attracting consumers with dedicated service and high-quality food along with satisfying them and making them loyal consumer is critical for the success of the business (Gilbert et al., 2004). It has been noted that the need foreateries arises for various reasons as they fill the gap when people have the need to eat out of their homes. For the majority of consumers having a memorable experience especially for dining, not just eating out of home, seems to be very prominent. (Ryu & Han, 2011) opined that consumers look for best food and services to have an unforgettable experience at restaurants.

Business enterprises whose offerings are physical products would find it difficult to compete well unless they included a range of services with their products (Kumasey, 2014). While manufactured products are typically more tangible than services, they are nevertheless marketed with an accompanying degree of intangible services.

Wilson et al. (2008) contends that only few goods are purely intangible or totally tangible. This contention is valid for an Alcohol and Liquor manufacturer, which is classified in the manufacturing sector of the economy. While Alcohol and Liquors is the obvious product offering, several services were accompanied on product sales and distribution to customers (Kumasey (2014).

Assurance indicates knowledge and courtesy of employees and their ability to inspire trust and confidence. Parasuraman et al. (1988). discovered that assurance is one of the core dimensions of service quality that impacts customer satisfaction because it implants a favourable perception of an organization in the mind of a customer. Customer satisfaction or dissatisfaction results from experiencing a service and comparing that experience with the kind of quality of service that was expected (Oliver, 1980). Many customer satisfaction studies have concluded that there is a significant relationship between customer satisfaction and loyalty. Hence, the primary objective of service providers is to develop and provide services that satisfy customer needs and expectations. Customer needs and expectations are changing when it comes to governmental services and their quality requirements.The nature of the relationship that exists between service quality and customer satisfaction has always been a topic of great debate amongst services marketing scholars (Taylor & Baker, 1994). Perplexing however, is the issue of how these two constructs combine to impact on consumer purchase intentions (Gronroos, 1993: Rust & Oliver, 1994). Oliver (1994) defined customer satisfaction as the "psychological state resulting when the emotion surrounding confirmed or disconfirmed expectation is coupled with the consumers 'superior feelings about the consumption experience" The term "disconfirmation" which relates to the fulfillment of expectation may be positive (when product/service performance exceed expectations), negative (when product/service performance falls below expectations) or zero (where expectation equals performance).A pilot survey conducted by the researchers suggests that eatery centres operating in the Southeast, Nigeria are encountering some issues because of increase in competition amongst the operators. As a result, different strategies and tactics are formulated to retain the consumers and increasing the service quality level has been considered key success factor. Serviceassuranceis specifically pertinentin the eateryservices context because it provides high level of customer satisfaction and hence it becomes a keyto competitive advantage.

In recent time, there are a good number of complaints lodged by the public because of delays in addressing their need and making services available to them by some Ghanaian public organizations (Blumberg et al., 2005). There is therefore the persistent problem of understanding consumer's needs and expectations and matching it with the firm's definition of such needs. The wider this gap, the higher the consumer's dissatisfaction and this is what this study sets out to determine.

LITERATURE REVIEW

Concept of Service

Concepts of service are of great importance; this is because of the impact it has in businesses across the world. Service is largely intangible and is normally experienced simultaneously with the occurrence of production and consumption. It is the interaction between the seller and the buyer that renders the service to customers (Groonroos, 1988). Service could also be viewed as any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Kotler and Keller (2006) defined services as a form of product that consists of activities, benefits, or satisfactions offered for sale that are essentially intangible and do not result in the ownership of anything. In the opinion of Lovelock and Wright, (2002) and cited by Nimako and Azumah, (2009) services refer to economic activities offered by one party to another, most commonly employing time-based performances to bring about desired results in recipients themselves or in objects or other assets for which purchasers have responsibilities. Some scholars however contend that service and services have different connotations (Solomon et al., 1985; cited in Nimako &Azumah, 2009). Whilst "service" involves the whole organizations performance in providing the customer with a good experience, "services" implies something that can be offered to the customer. Needless to say, "services" by definition are outcome-related or directed at the value created since it is something of value delivered to a performance to meet customers' needs. Services are also distinguished from goods because they possess some unique characteristics. Hinson (2006) suggests four service characteristics and these are intangibility, inseparability, heterogeneity and perishability.

Quality

According Ghylin (2008), quality has been considered as one of the important attributes of an entity (as in property and character), a peculiar and pertinent feature of a product or a person (as in nature and capacity), a degree of excellence (as in grade) and as a social status (as in rank and aristocracy) and in order to control and improve its dimensions it must first be defined and measured. The above definitions

of quality throw more light in understand concept quality and indicates out that quality has many different ways people look at it.

Service Quality

In today's increasingly competitive business environment, service quality is essential for the success of any organization. Service quality is important aspect that affects the competitiveness of business. Banks should always increase the quality of service continuously since there is no assurance that the current outstanding service will be suitable for future. Thus, banks should develop new strategy to satisfy their customer and should provide quality service to gain competitive advantage over competitors (Siddiqi, 2011).

Service quality is considered an important tool for a firm's struggle to differentiate itself from its competitors (Ladhari, 2009). The relevance of service quality to companies is emphasized especially the fact that it offers a competitive advantage to companies that strive to improve it and hence bring customer satisfaction. The challenge in defining service quality is that it is a subjective concept, like beauty. Everyone has a different definition based on their personal experiences. It has also received a great deal of attention from academicians, practitioners and services marketing literature, service quality is defined as the overall assessment of a service by the customer. Researcher points out that, by defining service quality, companies will be able to deliver services with higher quality level presumably resulting in increased customer satisfaction. Understanding service quality must involve acknowledging the characteristics of service which are intangibility, heterogeneity and inseparability. In that way, service quality would be easily measured.

According to Lovelock and Wright (2002), after making a purchase, customers compare the service expected to what is actually received. Customers decide how satisfied they are with service delivery and outcomes, and they also make judgements about quality. Although service quality and customer satisfaction are related concepts, they are not exactly the same. Many researchers believe that customers' perceptions about quality are based on long term, cognitive evaluations of an organization's service delivery, whereas customer satisfaction is a short-term emotional reaction to a specific service experience. Following service encounters, customers may evaluate the levels of satisfaction or dissatisfaction and may use this information to update the perceptions of service quality. Customers must experience a service before they can be satisfied or dissatisfied with the outcome. Although researchers have studied the concept of service for several decades, there is no consensus about the conceptualization of service quality (Cronin & Taylor, 1992) as different researchers focused on different aspects of service quality. Reeves and Bednar (1994) noted there is no universal, parsimonious, or all-encompassing definition or model of quality. However, the most common definition is the traditional notion that views quality as the customer's perception of service excellence, i.e. quality is defined by the customer's impression of the service provided (Parasuraman, Zeithaml & Berry 1985). Thus, service quality is defined as the gap between customers' expectation of service and their perception of the service experience. The assumption behind this definition is that customers form the perception of service quality according to the service performance they experienced. It is therefore the customer's perception that rates the service quality of an entity. Many researchers accept this approach of service quality. According to Gröonroos (1988), service quality is commonly defined as a discrepancy between the service quality that is delivered by the organization and the service performance that employees expect. Lewis (1994) suggests that perceived service quality is a consumer judgement which is derived after comparing consumer's expectations of service with their perceptions of actual service performance. Conceptually, service quality is defined as global judgment or attitude relating to the overall excellence or superiority of the service (Parasuraman et al., 1988).

Products Quality

Aniuga *et al.* (2023*)* contended that product quality informs consumer satisfactionandimproves marketing performance. Product quality is defined as the collection of features and characteristics of a product that contribute to its ability to meet given requirements. The characteristic of a product or service that satisfies the customer's wants and needs in exchange for monetary considerations. If the consumer is satisfied that he/she had a fair exchange, then the quality is acceptable. A perception of high quality or that which is above expectations can help to create high brand loyalty and in turn helps create brand equity for the company, Temba(2013).

Assurance

Assurance is a service quality that requires the staff of the service providers to possess the required skill and knowledge as to display necessary professional skills. Assurance is concerned with the knowledge and courtesy of employees and their ability to inspire confidence in their customers (it has four items).

Assurance has "the strongest impact on customer satisfaction that leads to positive word of mouth outcome" (Arasli *et al,* 2005). Khan and Fasih (Berry *et al.* (2009), says that the process of acquired knowledge being showcased by staffs in executing their term of preferences during service delivery can be highly assuring to customers. This gives customers the confidence that the service delivery representative will perform his/her duty professionally and ethically. Naidoo (2014) argues that not all customers have the expertise to understand the quality of service and values they received, and as such may require effective communication or personal explanations to understand the value they receive. This service quality dimension is performed through the people aspect of service quality (Kaura *et al.*, 2012).

Customer Satisfaction

Customer satisfaction is a post-purchase evaluation of a service offering. A traditional definition of customersatisfaction followed the dissatisfaction paradigm of consumer satisfaction/dissatisfaction, suggesting that customer satisfaction/ dissatisfaction is the result of interaction between the consumer's pre-purchase expectations and post purchase evaluation. According to Rigopoulou *et al.* (2008) customer satisfaction is the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. Service companies have since recently focused on customers in order to improve competitiveness. Customer satisfaction is one of the important outcomes of marketing activity.

Impact of assurance on customer satisfaction

Research from Parasuraman *et al.* (1988) discovered that assurance is one of the key measurement of service quality that impacts customer satisfaction because it implants a favourable perception of an organization in the mind of a customer. Thus, encouraging the likelihood of word-of-mouth activity especially in financial institutions. A reliable financial service provider implants a high level of confidence in the mind of its customers (Khan & Fasih, 2014, Ndubisi, 2006 and Ndubisi & Wah, 2005). This dimension is facilitated through the people aspect of service quality (Kaura *et al*, 2012).

Service quality in eatery centres

There is need to look at service quality in relation to eatery centers. Studies looking at service quality in relation to eatery centers or restaurants use three main dimensions of service quality-food quality, physical environment (ambience) and employee service (Dutta *et al.*, 2014,). Ryuand Han (2012) highlighted the importance of service and food quality as a measure of customer satisfaction in the eatery centres. In this guise, five aspects of food quality were adopted - the food is fresh, the food is delicious, the food is nutritious, there is variety of menu items and the aroma of the food is enticing. Qin and Prybutok (2009) explored the potential dimensions of service quality and examined the relationships between service quality, food quality, perceived value, customer satisfaction and behavoural intentions in fast food restaurants and pointed out that service quality has a positive and direct influence on customer satisfaction. Service quality connotes timely delivery, good employee customer relation, dignity in service, clean atmosphere and the likes.

Theoretical Review

This study was anchored on the expectation fulfillment theory and developed the GAP Model

This research adopted expectation fulfillment theory proposed by Linder-Pelz, (1982). The theory predicts experience that is congruent with expectation will result in satisfaction and that which differs will result in dissatisfaction. Satisfaction is a construct that can generally be examined in two distinct ways either as a dependent or independent variables.The theory operates by stating variables that determine satisfaction. The theory concludes that expectations and perceived occurrences make independent contributions to satisfaction rather than satisfaction resulting from an interaction between expectations, values and occurrences. This model also corresponds to the DINESERV model.

Parasuraman *et al* (1985) developed the GAP Model of ten dimensions of service quality. The dimensions include "reliability", "responsiveness", "competence", "access", "courtesy", "communication", "credibility", "security", "understanding/knowing the customer" and "tangibles". The originators of the gap model asserts that there are discrepancies between the firm and customers' perception of service quality delivered. They argued that their framework can be used in identifying differences in the quality of services rendered (Burch, Rogers & Underwood, 1995). Earlier, scholars such as (Nelson, 1972) identified credibility and tangibles as "search properties", competence and security as "credence properties", while Parasuraman *et al,* (1985) argued that consumers typically rely on "experience properties" when evaluating service quality. Based on this, Parasuraman *et al* (1985) developed the SERVQUAL Scale. The scale was designed to uncover broad areas of good and bad service quality as well as, indicate areas of service quality trend over time, especially when used with other service quality techniques. Using these theory and model, the researchers determined the impact of service assurance on consumer satisfaction of eatery centres in the South East.

Empirical Review

Obasiabara *et al.* (2023) examined the impact of service quality on consumer satisfaction of eateries in the Southeastern, Nigeria. Specific objectives are to: determine the impact of reliability on consumer satisfaction of eatery centers in the South East, ascertain the impact of assurance on consumer satisfaction of eateries in the South East, examine the impact of tangibility on consumer satisfaction of eateries in the South East,assess the impact of empathy on consumer satisfaction of eateries in the South East and investigate the impact of responsiveness on consumer satisfaction of eateries in the South East. This study adopted the descriptive survey design. A sample of 295 customers were administrated questionnaire for data collection and analysis. The questionnaire is designed in 5-point Likert Scale and validated. The research hypotheses were analyzed using multiple regression with the aid of SPSS. From our findings, it was discovered that reliability, assurance, tangibility dimensions of service qualities have positive influence at 1% level of significance on customer satisfaction while it was discovered that empathy and responsiveness dimensions of service qualities have negative but significant influence at 1% level of significance on customer satisfaction. Based on the results of this study, the following recommendations were made; Service providers of eateries in the southeast, Nigeria should improve on the following dimensions of service qualities; reliability, assurance. The marketing implication of this findings is that customers are satisfied with timely response to orders as well as the service providers' ability to portray a feeling of consistency with the services rendered.

On a related study, Nwokah (2018) looked at the predictor effect of food quality on patronage of quick service restaurants in Port-Harcourt Nigeria. Questionnaires were distributed using Krejice and Morgan table. Descriptive statistics were used in analyzing the respondents' demographics while spearman Rank correlation techniques was used in testing the hypotheses of the study. Results revealed that there was a significant relationship between food and service quality and patronage of quick-service restaurants.

Ahmed (2015). In the study which was anchored in Saudi Arabia, he investigated the relationship between service quality, food quality and customer satisfaction and retention. A survey approach was used and SERVQUAL model was applied to measure service quality. Data collected were analyzed using SPSS version 20.0 and findings showed that service quality and food quality have a positive influence on customer satisfaction.

In a similar manner, Tesfaye (2015) carried out a study on the impact of service quality on customer satisfaction the case of commercial bank of Ethiopia, he said that the government of Ethiopia has launched economic reforms, financial liberalization measures and restructuring of financial institutions with the aim of promoting a competitive environment and efficient banking services to the public. Commercial Bank of Ethiopia was incorporated as a share company on December 16, 1963 per proclamation number 207-1955 to take over the commercial banking activities of the former state Bank of Ethiopia. However, the performance of CBE in providing quality service is not in a position to meet the expectation of service users. There are repeated customer complains. Therefore, the major objective of this study is assessing the impact of service quality on customer satisfaction in five branches found under CBE, south Addis Ababa district. To attain this objective, questionnaire was designed categorized under five dimensions of the SERVEQUAL model. The sample consists of 400 respondents selected based on convenience sampling procedure. This study used quantitative research design and both primary and secondary data. The collected data was analyzed with the help of SPSS version 20. Correlation and multiple regressions were used to investigate the relationship between dependent and independent variables. The correlation results indicate that there is a positive correlation between the dimensions of service quality and customer satisfaction. The results of the regression test showed that offering quality service have positive impact on overall customer satisfaction. And also, the highest correlation is between responsiveness and customer satisfaction followed by reliability. The finding of the analysis showed that, the performance of CBE in providing quality service is not in a position to meet the expectation of the customer. Low service quality leads low customer satisfaction. Based on this, in order to improve performance of the bank, the researcher recommended that, the bank should prepare complaint handling mechanisms, relevant training for its front-line employees.

Kumasey (2014) contends that satisfaction of human need is an essential objective firms aim to achieve. The study examined service quality and customer satisfaction in the Ghanaian public service. Using correlational research design and a purely quantitative research approach, the researcher collected data from 304 participants using questionnaire. The hypotheses were tested using Pearson product-moment correlation test. The result showed that service quality significantly and positively related with customer satisfaction. In addition, customer perception and expectation significantly and positively related with customer satisfaction.

According Zeleke (2012) cited in Obasiabra *et al.* (2023), the aim of the study is to analyze whether perceived customer service directly related to customer satisfaction regarding the National Alcohol & Liquor Factory (NALF) customers in Addis Ababa. The research uses a quantitative methodology and a self-completion questionnaire with closed questions was conducted to test the hypothesis. Accordingly, a sample of 300 was taken from 4200 customers in Adds Ababa which is 7.14% of the total population to increase the margin of accuracy. The findings of the study indicated that five service quality dimensions were positively related to overall service quality and are indeed drivers of service quality which in turn has an impact on customer satisfaction. The study findings also indicated that all the standardized coefficients relating the service quality dimensions to overall service quality and to customer satisfaction have the expected positive sign and are statistically significant. The impact of five service quality dimensions on customer satisfaction was significant in all factors of service quality. More specifically, customers indicated high satisfaction with the five dimensions of service quality examined in the study (Reliability, Responsiveness, Empathy, Assurance, and Tangibles). In this regard it was interesting to note that the dimension of Responsiveness and empathy had the lowest mean ratings; however, the correlation between Assurance and customer satisfaction was the highest, which implies that improvement in employees Assurance is an important issue that requires attention. The research also concluded that service quality can be used to predict customer satisfaction. 79.2% of the variation in customer's satisfaction was explained by the five service dimensions studied here, the remaining 20.8 % is explained by other factors that were not examined in this study. For example, customer's satisfaction might be influenced by such factors as price, and service variety.

Tam (2004) study examines the relationships among customer satisfaction, service quality, post purchase behavior, perceived sacrifice and perceived value. These variables are increasingly believed to be the source of competitive advantage in the service providing firm. From the literature, the definition of the variables was vividly presented which is a necessity for firm growth in profitability. The study discovered that there is significant positive relationship between perceived value with customer's satisfaction and post-purchase behave. In a normal economics term, the value of any product is the cost price of that particular product in the market. That is to say when customers evaluate the perceived value in terms of price, it will motivate the customers to buy more of products due to the maximum satisfaction so experience and even recommend the product to others thereby increasing the profitability of the firm and growth. The methodology of the study applied survey design in its data collection and only two hundred and seventeen respondents were the total number of respondents used for the study.

In the discussion of its finding, it was evident that even though customer satisfaction has been used as a means of achieving the goals of a business firm, the present study shows that perceived value has greater influence on post-purchase behaviour than customer satisfaction. This goes home to buttressing earlier statement that the value of any product in the market is cost price i.e. price is a major determinant of value. Customers places more value on the price in order to achieve satisfaction which will lead to post-purchase behaviour thereby leading to profitability of firm. The reason been that value for price encourages repeated purchases

Gaps in literature

A number of gaps in the empirical review were identified. Firstly, most previous studies as reviewed in the literature approached service quality from the perspectives of measuring it with the SERVQUAL model. The use of the DINESERV model would provide literature for subsequent researches in the area. More so, most of these studies were conducted in foreign economies where the market dynamics are different from that of Nigeria. It is the intention of this study to fill this gap and showcase service quality in Nigeria economy especially in South East Nigeria using the DINESERV model. Secondly, there is empirical evidence that organizations are interested in the service dimension (s) that causes customer satisfaction. For the fact that this study is personalized in the use of DINESERV, it would assist in identifying the particular dimension (s) of service quality that leads to customer satisfaction.

METHODOLOGY

This study adopted the descriptive survey design which facilitates the description of situation in its current state and solicits information directly from the respondents who make information more distinct and finite and the researchers are not in complete control of the elements of the research. The area of coverage of this study is the Southeast, Nigeria. The southeastern part of Nigeria is predominantly inhabited by the Igbo speaking ethnic group in Nigeria. For the purposes of administration, the region is divided into five states namely: Abia, Anambra, Ebonyi, Enugu and Imo. It was from this area that the study focused; population and samples studied were extracted from this area. The population of the study consist of consumers of

eateries in the southeast. The 5-point Likert scale on two extremes of 1 (strongly disagree) and 5 (strongly agreed) was adopted in developing the scaling of the responses of the respondents. Due to the infinite nature of the population of this study, pilot survey was carried out in order to determine the sample size. Out of 365 respondents that participated in the survey, only 295 copies of questionnaire were valid for final analysis. The justification for using questionnaire and survey research design hinges on the large size of the respondents. However, the use of regression design is predicated upon by the objective of the study. For analysis, simple linear regression model was used in analyzing the hypothesis through the use of SPSS.

Table 1: Reliability and Internal Consistency

Factor	Reflective item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Standardized Cronbach's Alpha	Cronbach's Alpha if Item loading
Service Assurance	This eatery has staff members that can answer my questions completely	18.6000	11.799	582	.514
	The staff members make me feel comfortable and confidant in my dealings with them	17.7254	13.635		.609
	The staff members of this eatery are both capable and willing to give me information about menu items, their ingredients and methods of preparation	18.2983	11.632		.501
	The staff members of this eatery makes me feel personally safe	18.8237	13.173		.736
	This eatery has personnel that seem well trained, competent and experienced	18.2610	17.030		.770
	This eatery seems to give employees support so that they can do their jobs well.	18.3593	13.129		.515
Customer Satisfaction	Overall, I am satisfied with the services of this eatery center	4.3864	1.211	568	-.132[a]
	Overall, I am pleased with the services of this eatery center	4.2305	3.681		.832
	Overall, the meeting benefits provided by this eatery is favourable	4.4068	2.011		.660

Source: Authors computation using SPSS 20.0

Reliability and Internal Consistency

To achieve consistency of the research instrument used in the data gathering and analysis, reliability test was conducted. Because, for research instrument to be valid and reliable, it must prove to a reasonable extent that it adequately measures what it is supposed to measure (validity) and maintain consistency in repeated applications (reliability). Thus, in this study, the reliability assessment was done using the Cronbach's alpha. The justification for adopting this measure is due to the conservative nature of Cronbach approach in measuring reliability and consistency. According to Hong and Cho (2011), the minimum benchmark that must be achieved to establish reliability of research instrument is 50 percent

value of Cronbach's alpha ($\propto \geq 50\% \, or. 5\%$). A total of 6 major variables or constructs were utilized in the analysis; out of which, 32 reflective indicator-derived from the 6 major constructs of the study were also tested to ascertain the level of the consistency and reliability among them. The results of our reliability test indicate an excellent reliability outcome. For instance, the Cronbach alpha values for the 6 major variables range between the highest value of 92 percent and the lowest value of 52 percent at both extremes. These are far above the 50 percent benchmark as indicated above. Additionally, individual reflective indicators also showed high level of reliability with adequate scale mean. The reflective indicators reliability value also falls within acceptable range except for two reflective indicators.

RESULTS AND DISCUSSIONS

Table 2. Distribution of Demographic Variables

Age Range	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
less than 25years	42	14.2	14.2	14.2
26 to 35 years	115	39.0	39.0	53.2
36 to 45 years	118	40.0	40.0	93.2
45 years and above	20	6.8	6.8	100.0
Total	295	100.0	100.0	
Gender	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
Male	132	44.7	44.7	44.7
Female	163	55.3	55.3	100.0
Total	295	100.0	100.0	
Marital Status	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
Married	168	55.3	55.3	55.3
Single	127	44.4	44.4	99.7
		.	.	100.0
Total	295	100.0	100.0	
Educational Qualification	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
FSLC	103	34.9	34.9	34.9
WAEC/SSCE	88	29.8	29.8	64.7
HND/BSC	81	27.5	27.5	92.2
MSC/PhD	23	7.8	7.8	100.0
Total	295	100.0	100.0	
Income Range	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
less than 50,000 a month	151	51.2	51.2	51.2
50000 to 100000	123	41.7	41.7	92.9
150000 to 200000	12	4.1	4.1	96.9
200000 and above	9	3.1	3.1	100.0
Total	295	100.0	100.0	

Source: Authors computation using SPSS 20.0

Table 2 Presents Distribution of Demographic Variables. Age distribution of the respondents. It shows that respondents that are between the ages of 36-45 years has the highest frequency of 118 which represent 40% of the total population. Followed closely are the respondents that are between the ages of 26-35 years which represents 39%. The implication of this an average percent of 39.9% of the persons that patronizes eatery in the South east are middle-aged adult. Respondents below the age of 25 years are 42 representing

14.2% of the total population, while, 20 respondents above 45 years, this represent 20% of the total population sampled. Gender distribution of respondents under study. It shows that female have the larger frequency with 163 respondents, this represents 55.3% of the total population under sample. Their male counterpart were 132 respondents; this represent 44.7% of the total population under study. Marital status of the respondents, under this study, it shows that 163 respondents are married, this represent 55.3% of the population under study. Singles were 131 of the total population; this represents 44.4% of the total population under study. Educational qualification distribution of the respondents. It shows that respondents that had First School Leaving Certificate as their highest qualification has the highest frequency of 103, this represent 34.9% of the total population. Followed closely are the respondents that has Secondary School Certificate Examination (SSCE) as their highest qualification, this represents 29.8% of the population under study. Respondents with first degree (that is, HND or B.Sc. were 81 representing 27.5% of the total population under study. Additional qualification such as PhD and M.Sc. garnered a total of 23 respondents, this represents 7.8% of the total population under study. Income distribution of the respondents, it shows that respondents that earn less than 50, 000 monthly has the highest frequency of 151, this represent 51.2% of the total population. Followed closely are the respondents that earn between 50, 000 to 100, 000 monthly with 123 respondents, this represents 41.7% of the population under study. Respondents who earned between 150, 000 to 200, 000 monthly are 12, representing 4.1% of the total population under study. Income of 200, 000 and above garnered a total of 9 respondents, this represents 3.1% of the total population under study

Table 3 Descriptive Statistics

Factor	Mean	Std. Deviation	N
SUM_ServAssur	7.3379	1.39375	295

Source: Authors computation using SPSS 20.0

Table 3 above showed the summary of descriptive statistics of the data generated from the survey. It showed a valid data of two hundred and ninety-five respondents. The mean, service assurance shows a high figure of the study. Descriptive statistics wascomputed summary by SPSS, the researchers.

Test of Hypothesis

To achieve the specific objective of the study, the research hypothesis that wasformulated in the introductory section of this study was duly tested in this section. This hypothesis was tested by the researchers with keeping in mind to ascertain the impact of service assurance on consumer satisfaction of eatery centres in the southeast, Nigeria. In doing this, linear regression method anchored on Ordinary Least Square (OLS) was employed for testing the hypothesis.

The research hypothesis is restated in both null and alternate as follows:

Ho: Assurance has no significant influence on consumer satisfaction of South East eateries.

H_1: Assurance has significant influence on consumer satisfaction of South East eateries.

Data Analyses and Interpretation

This section tests the null hypotheses formulated for the study to draw conclusions and discuss the finding.

Table 4 Summary of Model Test of Fitness

Model	R	R Square	Adjusted R. Square	Std. Error of the Estimate	Change Statistics					
					R. Square Change	F Change	df1	df2	Sign. F Change	Durbin-Watson
1	.901	.687	.649	.35497	.812	249.567	1	298	.000	.239

a. Predictors: (Constant), SUMServAssur.
b. Dependent consumer satisfaction

Source: Authors computation using SPSS 20.0

Table 4 indicates diagnosis test of the model. The value R, R2 and adjusted R2 and 0.901, 0.687 and 0.649 respectively. The R value is the coefficients of relationship that explain the association between the dependent and independent variable which is a strong positive association. Hence, there is no problem of multicollinearity since none of the correlation coefficient is greater than ± 0.09. In addition, the R2 value

show that 68.7 percent of the variation in the dependent variable (on consumer satisfaction) is explain by the independent variable (assurance).

Impact of Assurance on Consumer Satisfaction of Eateries in Southeast, Nigeria
Table 5 Coefficient[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Prob(Sig).	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.197	.170		7.022	.000	0.0178	
SUM_ServAsuer	.060	.022	.103	2.788	.006	0.129	51.110

a. Dependent Variable: This eatery has visually attractive parking areas and building exteriors

Source: Authors computation using SPSS 20.0
In the table 5 above, the result of the simple linear regression output between the study variables has a constant β value of 1.197 and standard error of 0.170. Reliability dimension of service assurance has positive co-efficient β value of .060 with standard error .022, t- value of 2.788 and significant level of 0.006 (6%). Hence, service assurance has positive significant influence on consumer satisfaction. This finding is in line with Obasiabara, Aniuga, & Ogba (2023) who conducted a study on the impact of service quality on consumer satisfaction of eateries in the Southeastern, Nigeria and discovered that assurance as one of the dimensions of service quality has positive significance influence on customer satisfaction.

ANOVA[a]

Table 6

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	157.232	1	31.446	249.567	.000[b]
1	Residual	36.415	289	.126		
	Total	193.647	294			

a. Dependent Variable: consumer satisfaction
b. Predictors: (Constant), SUM_ServAssur
Source: Authors computation using SPSS 20.0

Table 6 shows the ANOVA result that discloses the significance of the overall regression output. The F. statistical value (p-alpha) is 249.567 which is significant at 1% (0.000). There is statistically significant as significance of F change value is 0.000. This reveals that the research model is fit for this study going by F statistic rule of fitness. The research model is only fit for study if significance of F statistic value is less than 0.005 ($p < 0.005$).

CONCLUSION AND RECOMMENDATIONS

This study is centered on how service assurance can lead to consumer satisfaction of eateries in the Southeastern, Nigeria. The growing literature on service assurance depicted that discovering the appropriate measuring scale for service assurance is one of the problems confronting the business manager. The researchers investigated whether assurance dimension of service quality has a positive and significant influence on customer satisfaction. From the finding, it was discovered that service assurance has a positive influence at 1% level of significance on consumer satisfaction. This study concludes that 99% level of confidence that service assurance positively influences consumer satisfaction. The marketing implication of this finding is that consumers are satisfied with timely response to orders as well as the service providers' ability to portray a feeling of competence with the services rendered. Based on this finding, it is recommended that the service providers of eateries in the southeast, Nigeria should take into cognizance

the importance of the service assurance as it has been established that it can lead to consumer satisfaction. In this regard, improve on their timely delivery of customers' orders by ensuring that the employees are trained on the rudiment of marketing and a need to appear smart and clean at all times, as this would portray competence to the consumers.

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ENTREPRENEURIAL MARKETING AND CUSTOMER PATRONAGE OF SMES IN ABA, ABIA STATE: THE ENDOGENOUS AFRICAN BUSINESS PERSPECTIVE

Agodi, Joy E. and Ahaiwe, Emmanuel O.
Michael Okpara University of Agriculture, Umudike.P.M.B 7267 Umuahia, Abia State, Nigeria.
Correspoding author: joyeberechukwu2@gmail.com

ABSTRACT
The study's main goal was to investigate, from an indigenous African business perspective, how entrepreneurial marketing affects customer patronage of SMEs in Aba, Abia State, Nigeria. The specific aims were; to ascertain the effect of resource leverage on customer patronage of SMEs in Aba, Abia State, Nigeria; investigate the effect of value creation on customer patronage of SMEs in Aba, Abia State, Nigeria; and ascertain the effect of proactiveness on customer patronage of SMEs in Aba, Abia State, Nigeria. This study used a survey method as its research methodology. Managers and operators of SMEs in Aba, Abia State of Nigeria made up the study's population. A non-probability sampling method called convenience sampling was employed to choose 260 individuals who were focused on entrepreneurship. A simple regression analysis was used to analyze the collected data. The SPSS software version 25.0 was used for all analyses. Results showed that consumer patronage of SMEs in Aba, Abia State, Nigeria, is positively and significantly impacted by value creation. This suggests that value creation plays a major role in influencing the consumer patronage of SMEs in Aba, Abia State, Nigeria. Regression analysis was also used to show that resource leverage had a positive and significant impact on customer patronage of SMEs in Aba, Abia State. This suggests that resource leverage plays a major role in the customer base that SMEs in Aba, Abia State of Nigeriahave. Ultimately, the study demonstrated that proactiveness was a positive and important element influencing customer patronage of SMEs in Aba, Abia State of Nigeria. The policy implications based on the findings of the study is that SMEs owners in Aba, Abia State of Nigeria must create and deliver unique values that differ from that of their competitors if they must achieve increased patronage. Also, they must device prudent ways of managing their limited resources in order toincrease customer patronage. There must be policy directions within every SMEs in Aba, Abia State on the need to always engage intrainings on entrepreneurial marketing in order to identify business opportunities that will help them achieve maximum patronage.
Keywords: Entrepreneurial marketing, value creation, resource leveraging, pro-activeness, Customer patronage

INTRODUCTION
In the current economic environment, where competition is growing at a quick pace, entrepreneurial marketing looks to be a unique notion that is gaining the interest of decision makers and marketers in many different kinds of organizations. Entrepreneurial marketing is acknowledged as an effective strategy that blends essential components of entrepreneurship and marketing into a fresh concept that allows companies to use marketing processes to act in an entrepreneurial way (Hallback & Gabrielsson, 2011; Crick, 2004). Entrepreneurial marketing places a strong emphasis on developing novel ideas and inventions based on an intuitive understanding of market demands (Morrish *et al.,* 2010; Hills *et al.*, 2008; Strokes, 2000). In smaller businesses with less resources and that must adopt innovative strategies and astute techniques to sustain and expand their operations, entrepreneurial marketing is typically associated with contemporary marketing methods (Jones & Rowley, 2011; Martin, 2009; Sadiku-Dushi *et al.,* 2019).
The idea of entrepreneurial marketing is suggested as one tactic SMEs might use to obtain a competitive edge over competing companies and improve performance as the company narrative changes. Customers are the primary source of motivation for entrepreneurs, according to entrepreneurial marketing. Because of this, entrepreneurial marketers shouldn't undervalue the significance of leveraging consumer understanding to generate fresh concepts, novel goods, and cutting-edge procedures. Sadiku-Dushi *et al.* (2019) claimed that when SMEs understand that traditional marketing efforts are out of place in today's dynamic markets, entrepreneurs turn to fresh, creative techniques and strategies. Any technique that falls under this category is entrepreneurial marketing, which is a more all-encompassing and current idea that stresses innovative methods for risk management, resource optimization, and value generation (Alqahtani &Uslay, 2020; Becherer & Maurer, 1997; Thomas *et al.,* 2013).

Because of their contribution to the expansion and development of diverse economies, small and medium-sized enterprises (SMEs) are held in high regard within national economies. As such, they are known as the nation's growth engine and catalyst for socioeconomic reform (Ogbo & Agu, 2012). According to Kim and Hemmert (2016), SMEs can be identified from large companies by their size, resource constraints, corporate goals, and management style. The overall business environment conditions are subject to constant change due to market conditions, which in turn bring about competition, complexities, and ambiguity (Hock-Doepgen *et al*., 2021). As a result, SMEs are under increasing pressure to conform when it comes to being flexible, proactive, and incorporating innovation into their strategic marketing plans.

Research has shown that adopting an entrepreneurial approach when creating marketing strategy helps businesses to identify and seize opportunities as well as efficiently manage their marketing campaigns and initiatives (Bercherer *et al*., 2012; Eggers *et al*., 2020; Shaw, 2004). According to Effiomand Edet (2018), despite coordinated interventions by successive Nigerian governments and other stakeholders, the majority of newly created SMEs do not survive during their initial two years of existence, and those that already exist either close down or perform at a low level. This is all the more reason why company owners in Nigeria and around Africa need to go beyond contemporary methods of operation and take advantage of our abundant natural resources. African firms have long been known for their modest size and poor level of expertise, but these characteristics are starting to change.

For the first time in history, markets are emerging as a result of Africa's population increase, especially in its cities, creating enough domestic demand for companies to attract greater degrees of specialization and competitiveness (Economist, 2010). Due to this increasing need, new businesses are now beginning to search for creative ways to thrive. Due to Africa's growing participation in the global trade of goods and capital, the continent's resources are more crucial than ever for promoting development for all people, not just Africans (Burgis, 2015). The role of endogenous African business is to combine relatively unique natural resources with contemporary commercial acumen and expertise. Africa's social, economic, and cultural systems, together with its varied resource endowments, may be enhanced with the use of business expertise.

The goal of endogenous African business is to establish and maintain a competitive edge by the integration of contemporary business techniques with Africa's inherent natural resource advantages, as well as its economic, social, and cultural frameworks. Numerous academics have studied the relationship between the performance of businesses and entrepreneurial marketing (Alqahtani &Uslay, 2020; Alqahtani *et al*., 2022; Ayozie*et al.,* 2013; Fatoki, 2019). The relationship between entrepreneurial marketing and SME performance in Endogenous African Business has received minimal empirical investigation. Therefore, it is unclear to what extent the endogenous African business environment in Aba, Nigeria's Abia State, supports SMEs' client patronage and entrepreneurial marketing. Therefore, based on three entrepreneurial constructs - value creation, resource leverage, and proactiveness - this study fills this vacuum by analyzing entrepreneurial marketing and consumer patronage of SMEs in Aba, Abia State, Nigeria.

LITERATURE REVIEW

Entrepreneurial Marketing

The ability to proactively identify and seize market opportunities in order to attract and retain a significant number of profitable clients by utilizing innovative approaches to risk management, resource optimization, and value creation for particular target audiences is referred to as entrepreneurial marketing (Morris *et al*., 2019). According to Omura et al. (1983), the marketing and entrepreneurship domains place a strong emphasis on how crucial it is to discover market possibilities and operating in regularly evolving corporate environments. An effective strategy for boosting an organization's capacity for innovation is entrepreneurial marketing, according to Hallbäckand Gabrielsson (2011) and Morris *et al.* (2019). These views align with those of Maritz *et al.* (2010), who discovered that entrepreneurial marketing is a technique employed under certain circumstances, such as a complicated and turbulent market environment and limited resources and It also combines marketing with entrepreneurship.

Resource-advantage theory serves as the theoretical cornerstone upon which entrepreneurial marketing is based, according to Hunt & Lambe (2000). Resource-advantage theory's claims hold true for both traditional and innovative marketing strategies. Effective marketing programs can increase a firm's ability to produce new resources and increase the output of existing resources in accordance with the changing market requirements, features, and competition in the context of resource-advantage theory by employing and fostering innovativeness through the creative combining of resources in novel ways. According to Schumpter (2003), being an entrepreneur means being able to innovate in order to develop a new procedure, good or service, or industry and to select the most effective tactics in order to beat rivals.

Businesses that innovate successfully can gain a long-term competitive edge in their target markets, as well as improve their capacity to recognize the wants and desires of new clients, satisfy their requirements, and give them positive experiences. Entrepreneurial marketing helps companies stay relevant and competitive in a world where scientific and technological advancements have created many uncertainties. According to Okika et al. (2019), one of the most crucial components for small and medium-sized businesses to achieve exceptional performance and worldwide competitiveness is entrepreneurial marketing techniques.

Value Creation

For many businesses, gaining a competitive edge and recruiting consumers are the main goals, and this is why the idea of customer value has been prioritized (Babin & James, 2010; Gummerus, 2013; Petelis, 2009). Morris *et al.* (2002) defined value creation as the ability of marketing experts to identify untapped sources of customer value and blend them together in the best efficient way possible to deliver the desired value. Hamel & Prahalad (1993) assert that finding new sources of customer value and being able to offer customers the greatest results at a lesser cost than rivals are the keys to creating customer value.

According to Sharma (2016), in order to create new customer value, business owners should focus on using contemporary technology to try to serve customers in a way that is current. Marketing managers should also focus on understanding the needs of their customers and being able to provide products or services that are more well received by them than those of competitors (Batz & Goodstein, 1996; Sheehan & Bruni-Bossi, 2015). According to Stringfellow et al. (2004), it's critical to understand what consumers value when they're looking for a good or service and to communicate with them frequently via various media platforms. Customers determine perceived value by weighing all of the advantages of buying a good or service against the cost of doing so. When consumers believe that their expectations have been met, they are more inclined to maintain good relationships with a business and make repeat purchases from it. Additionally, it keeps the company competitive.

Resource Leveraging

One important perspective in the theoretical literature is the resource-based view (RBV), which maintains that organizational resources are valuable assets that may be used to obtain a competitive advantage and improve performance outcomes (Barney, 2001). A company is leveraging its resources when it expands its current resources and makes good use of them to provide increased customer value and benefits (Hitt *et al.*, 2001). Resource leveraging is defined as accomplishing more with fewer resources (Morris et al., 2005). They continued by saying that in order to completely use undeveloped resources, marketing practitioners need possess the necessary expertise, pertinent information, and critical abilities. According to Qin *et al.* (2017), effective entrepreneurial marketers make the most of their resources by maximizing them according to their aptitudes, experiences, and past performance. According to earlier research, resource leveraging improved company performance (Sadiku-Dushi *et al.*, 2019).

Schindehutte and Morris (2001) have proven that SMEs can become more competitive by learning how to leverage their resources by pooling them and routinely outsourcing critical functions. According to Fard and Amiri's (2018) findings, a firm's financial performance can be considerably impacted by entrepreneurial marketing aspects, including value creation, opportunity focus, customer intensity, and resource leveraging. These opinions are consistent with those of Symeonidou (2013), who showed that an entrepreneur can intentionally coordinate resource and strategy leveraging investments to achieve a higher performance than they could with just investment decisions alone during the start-up phase.

Proactiveness

Being proactive means having the ability to change a company's environment (Bateman & Crant, 1993). Being proactive from an entrepreneurial perspective means that a business redefines its external environment to reduce uncertainty, decrease reliance on others, and maintain competitiveness (Gao *et al.*, 2018). According to Al Mamun and Fazal (2018), proactiveness is demonstrated by an entrepreneur's willingness to outperform rivals through a combination of aggressive and proactive behavioural strategies. Examples of this include being the first to market with new services and products and preparing for future requests from customers that may induce changes and modifications in the company's environment. Therefore, by gathering crucial data on rivals and clients, proactive businesses aim to identify and meet the wants of the unmet consumers (Liu & Atuahene, 2018).

Proactive businesses service premium market segments, take advantage of first-mover advantages, and adopt price-skimming tactics before rivals. According to earlier research, proactiveness and firm performance have a favourable correlation (Lumpkin & Dess, 2001; Razaei, 2019; Yang & Meyer, 2019; Wanjan *et al.*, 2015). Proactive behaviour is a crucial component of an individual's initiative and will improve business success, according to McCormick et al. (2019). Additionally, proactiveness had a large

and favourable impact on a firm's competitive advantage, as demonstrated by Al Mamun and Fazal (2018).

Customer Patronage

Patronage represents a unique and important concept in marketing.Patronage refers to the support or endorsement that customers provide a certain brand. The foundation for a stable and growing market share is laid by patronage (Ulaikere *et al*., 2020). According to Burnkrant (1982), customer patronage is the result of a confluence of psychological elements that impact purchasing behaviour. These factors are valued by customers (Moye & Giddings, 2021) and serve as benchmarks for selecting which businesses to patronize (Ogbuji *et al,* 2016).

There are various ways to establish patronage behaviour which includees, loyalty, amount of money spent, frequency of repeat purchases, number of repeated visits, degree of satisfaction, amount of time spent, and the quantity of items purchased (Paswan, 2016).According to Sirgy and Grewal (2014), elements such aslocation, atmosphere, goods, price, and promotions might affect how consumers behave when making purchases. When SMEs understand the different variables affecting consumers' behaviour, it will assist them to increase sales, encourage repeat business, and foster customer loyalty. With respect to the current study, patronage will refer to a customer's willingness to repurchase, recommend, or revisit an SME.

Theoretical review

The resource-based view (RBV)

The Resource-Based View emphasizes how a firm's surroundings and internal attributes affect its success (Bruderl *et al.,* 1992). According to this perspective, a company is made up of diverse resources that have the ability to combine to form important capabilities that will work in the company's favour (Caldeira & Ward, 2003; Wernerfelt, 1995). Thus, the RBV improves knowledge of how resource heterogeneity helps businesses achieve and maintain success (Thornhill & Amit, 2003).

One of the first contributions to the RBV was Penrose's (1959) definition of a firm as a collection of management and entrepreneurial resources. According to Barney (1991), these resources provide services that are used as inputs in the production process. Heterogeneity, which sets one company apart from another, is the consequence of the variety of services provided by these resources (Peteraf, 1993). According to Lerner and Almor (2002), a corporation can leverage its competitive advantage to improve performance. As to Edelman *et al*. (2008), the RBV merely states that changes in a firm's efficiency in combining its resources lead to performance discrepancies among them.

Barney (1991) elaborated that resources possess unique qualities that make them valuable, uncommon, non-replaceable, and capable of sustaining a competitive advantage. Wernerfelt (1995) defined these resources as semi-permanently related tangible and intangible assets that represent a firm's strengths and shortcomings. Miller and Shamsie (1996) assert that intangible assets are knowledge-based, whereas tangible assets are property-based. Because they are difficult to copy and cannot be easily identified, intangible assets have a higher likelihood of producing a sustained competitive advantage as compared to tangible assets (Miller and Shamsie, 1996). Value creation, resource leveraging, and proactiveness—the three entrepreneurial qualities used in this study—all match quite well with RBV, which served as the study's foundation.

Empirical review

The impact of applying entrepreneurial marketing (EM) dimensions on organizational performance was examined by Rashad (2018) in a study titled "The Impact of Entrepreneurial Marketing Dimensions on the Organizational Performance Within Saudi SMEs." The results of regression analysis showed that people value performance, take measured risks, and are opportunity-focused. The author made a number of recommendations, including that since Saudi businesspeople are risk-takers, they should put more time and effort into planning and thinking through risk management strategies. They should also work to consistently find new methods for identifying opportunities. Furthermore, it is recommended to modify a blend of the remaining characteristics in order to augment the value generated for clients.

Wambugu *et al.* (2015) investigated the connection between small- and medium-sized Kenyan agricultural processing companies' performance and proactivity. According to the research, proactiveness significantly predicted the firm performance of Kenyan SMEs engaged in agro-processing. The impact of entrepreneurial orientation (EO) on the profitability of SMEs in Lagos State, Nigeria, was investigated by Olubiyi *et al*. (2019). The results showed that while autonomy and innovativeness were statistically unimportant, proactiveness and risk-taking had a positive significant impact on profitability, while competitive aggressiveness had a negative significant influence on profitability. The study found that EO significantly affects SMEs' profitability and suggested that proactiveness and risk-taking are key components of profitability for owners and managers.

Ogunode *et al.* (2020) conducted research on how entrepreneurial marketing affects Nigerian SMEs' success. The study concluded that entrepreneurial marketing stimulates economic growth and helps create new goods and services for current clients. Additionally, the survey implies that conventional marketing is the main method used by SMEs in Nigeria to connect with prospective customers and build their brands. Remarkably, very few of them use modern marketing strategies to advertise their products and services. Abdul (2020) looked into the advantages and disadvantages of small business entrepreneurial marketing. In addition to the process, a comprehensive analysis of relevant literature was conducted. The study adds to the body of knowledge by enhancing previous research in the same field and fostering a better understanding of the advantages and difficulties of entrepreneurial marketing among SMEs. The study concludes that entrepreneurial marketing enables business owners to think strategically and make a beneficial impact on the expansion of their companies. It helps SMEs generate sales, expand, and survive in today's competitive climate. It does this by enhancing market share, revenue, efficiency, and customer connections. The study highlights several obstacles, including insufficient marketing and managerial skills and talents, inadequate marketing tactics and unskilled sales reps, a tiny clientele, insufficient marketing endeavours, and inexperience on the part of managers.
Olannye and Edward (2016) investigated how entrepreneurial marketing affected the operations of fast food restaurants in Asaba, Delta State, Nigeria. The results of the study showed that, as indicators of entrepreneurial marketing, entrepreneurial pro-activeness, entrepreneurial creativity, and entrepreneurial opportunity recognition greatly increased competitive advantage.

METHODOLOGY

This study used a survey method as its research methodology. The study was carried out in one of Nigeria's industrial centers, Aba in Abia State. The SMEs in Aba, Abia State, made up the study population. The researcher's preference for the location is that a lot of SMEs operate within the area. However, considering the inherent difficulty in studying the entire population, the researchers applied convenience sampling method which is a non-probability sampling technique in selecting 260 owners and employees of 50 SMEs in Aba, Abia State. Therefore, based on a sample of 260 a well-structured questionnaire in a 5-point Likert scale was distributed which captured questions on the dimensions of entrepreneurial marketing inclusive of; value creation, resource leverage and proactiveness while customer patronage was the dependent variable.
The validity and reliability tests were conducted utilizing a pilot study, test-retest technique, and Cronbach Alpha model for a rating of 0.79, respectively, while minor changes were made to the questionnaire. Simple regression analysis was used to analyze the generated data. All analyses were done with SPSS software 25.0.

RESULT AND DISCUSSIONS

Effect of value creation on customer patronage of SMEs in Aba, Abia State of Nigeria

Table 1. The effect of value creation on customer patronage of SMEs in Aba, Abia State of Nigeriais shown in the simple regression table below

Model	Coefficient	Std. Error	t-value
Constant	4.890	1.612	3.021**
Value creation	5.604	2.042	2.744**
R^2	0.949		
Adjusted R^2	0.921		
F-statistic	44.994		

Source: Survey data, 2023
Note: **= Significant at 5% level

Value creation was a positive and significant factor that affects customer patronage of SMEs in Aba, Abia State, Nigeria, according to the regression result in Table 1. Value creation was positively correlated with customer patronage of SMEs in Aba, Abia State of Nigeria at the 5% probability level. This suggests that value creation plays a major role in influencing the consumer patronage of SMEs in Aba, Abia State, Nigeria. Customer patronage for SMEs in Aba, Abia State, rises in tandem with the practice of value creation.
In the above regression, the model specification was valid as indicated by the F-statistic of 44.994, which was significant at the 5% probability level. Customer patronage of SMEs in Aba, Abia State, Nigeria, is a linear function of the explanatory variable (value creation), according to the estimated regression equation.

Value creation accounts for 95% of the variation in the customer patronage of SMEs in Aba, Abia State, Nigeria, according to the r^2 value of 0.949. There is a 95% confidence level on this claim.

Effect of resource leverage on customer patronage of SMEs in Aba, Abia State of Nigeria

Table 2. The effect of resource leverage on customer patronage of SMEs in Aba, Abia State of Nigeriais presented in the simple regression Table below.

Model	Coefficient	Std. Error	t-value
Constant	8.406	2.842	1.736*
Resource leverage	0.297	0.080	3.700***
R^2	0.903		
Adjusted R^2	0.869		
F-statistic	56.168		

Source: Survey data, 2023

Note: *** = Significant at 1% level; * = Significant at 5% level

Resource leverage was a positive and significant factor influencing the customer patronage of SMEs in Aba, Abia State, Nigeria, according to the regression result in Table 2. At the 1% probability level, resource leverage was significant and significantly correlated with customer patronage of SMEs in Aba, Nigeria's Abia State. This suggests that resource leverage plays a major role in the customer base that SMEs in Aba, Abia State of Nigeria receive. Consequently, the customer patronage of SMEs in Aba, Abia State, grows in tandem with the development in resource leverage.

In the regression table above, the F-statistic was 56.168, which was significant at the 1% probability level and suggested that the model specification was accurate. According to the computed regression equation, resource leverage has a linear relationship with the customer patronage of SMEs in Aba, Abia State of NIgeria. With a r^2 value of 0.903, resource leverage accounts for 90% of the variation in customer patronage of SMEs in Aba, Abia State, Nigeria. There is 99% confidence in this statement.

Effect of proactiveness on customer patronage of SMEs in Aba, Abia State of Nigeria

Table 3. The effect of proactiveness on customer patronage of SMEs in Aba, Abia State of Nigeriais contained in the simple regression Table below

Model	Coefficient	Std. Error	t-value
Constant	1.752	5.236	0.335
Proactiveness	0.476	0.141	3.376**
R^2	0.881		
Adjusted R^2	0.863		
F-statistic	42.200		

Source: Survey data, 2023

Note: **= Significant at 5% level

Proactiveness was a positive and significant factor affecting customer patronage of SMEs in Aba, Abia State, Nigeria, according to the regression result in Table 3. In Aba, Abia State of Nigeria, proactiveness was positively correlated with customer patronage of SMEs, and it was significant at the 5% probability level. This suggests that being proactive has a big impact on customer patronage of SMEs in Aba, Abia State, Nigeria. Customer patronage for SMEs in Aba, Abia State, rises in tandem with proactiveness.

The above regression's F-statistic of 42.200 indicated that the model specification was accurate and significant at the 5% probability level. According to the computed regression equation, the explanatory variable (proactiveness) has a linear relationship with the consumer patronage of SMEs in Aba, Abia State of Nigeria. Proactiveness accounts for 88% of the variation in the customer patronage of SMEs in Aba, Abia State, Nigeria, according to the r^2 value of 0.881. There is 99% confidence in this statement. This outcome demonstrates that being proactive can significantly boost the number of customers that SMEs in Aba, Abia State receive.

Discussion of result

From the results of this study, value creation was shown to be a positive and significant factor that influences the consumer patronage of SMEs in Aba, Abia State of Nigeria. This suggests that value creation plays a major role in influencing the consumer base of SMEs in Aba, Abia State, Nigeria. This finding is in agreement with the results of Sharma (2016), Sheehan and Bruni-Bossi, (2015), and Stringfellow *et al*. (2004) who established that value creation is a significant factor that affects customer patronage.

Regression analysis was also used to show that resource leverage had a positive and significant impact on customer patronage of SMEs in Aba, Abia State of Nigeria. This suggests that resource leverage plays a major role in the customer base that SMEs in Aba, Nigeria's Abia State, receive. Previous studies such as

Schindehutte and Morris (2001), Sadiku-Dushi *et al*., (2019), Fard and Amiri (2018) have also found that resource leveraging had a positive effect on customer patronage. These studies (Schindehutte & Morris, 2001; Sadiku-Dushi *et al.*, 2019; Fard & Amiri, 2018) corroborated the results of this study and showed that firms can increase customer patronage when they can leverage their resources by sharing resources and routinely outsourcing critical functions.

Additionally, a regression study revealed that proactiveness had a positive and significant impact on customer patronage of SMEs in Aba, Abia State. This suggests that being proactive has a big impact on the number of customers that SMEs in Aba, Abia State, Nigeria receive. This is consistent with earlier research (Lumpkin & Dess, 2001; Razaei, 2019; Yang & Meyer, 2019; Wanjan *et al*., 2015) that showed a positive correlation between proactiveness and customer patronage. Proactive behaviour is a crucial component of an individual's initiative and will improve business success, according to McCormick et al. (2019). Additionally, it was demonstrated by Al Mamun and Fazal (2018) that being proactive has a major positive impact on patronage.

CONCLUSION AND POLICY IMPLICATIONS

Although it is a relatively new notion, entrepreneurial marketing has developed over the course of the last 20 years, but as of yet, no thorough theory exists. This study investigated the effect of three dimensions of entrepreneurial marketing on customer patronage of SMEs in Aba, Abia State of Nigeria. The results of this study showed significant positive effect of value creation, resource leveraging and proactiveness on customer patronage of SMEs in Aba, Abia State of Nigeria. The policy implications based on the findings of the study is that

SME owners in Aba, Abia State of Nigeria must create and deliver unique values that differ from that of their competitors if they must achieve increased patronage. Also, they must device prudent ways of managing their limited resources in order toincrease customer patronage. There must be policy directions within every SMEs in Aba, Abia State on the need to always engage intrainings on entrepreneurial marketing in order to identify business opportunities that will help them achieve maximum patronage,

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POLITICAL MARKETING, WOMEN EMPOWERMENT AND COMMUNITY DEVELOPMENT IN ABIA STATE

[1]Boniface, Moses O. and [2]Nwansi, Grace U.
[1]Department of Marketing, Michael Okpara University Of Agriculture, Umudike, Nigeria, [2]Department of Banking and Finance, Federal Polytechnic, Nekede, Owerri, Imo State, Nigeria
Corresponding author: bonifaceosumba@gmail.com

ABSTRACT
This paper is poised to establish that current innovations and strategies in political marketing reflect adaptation to the dynamic of human capacity building and community development, with particular emphasis on women's empowerment. This philosophy presupposes that political marketing should be dynamic to incorporate the nature, direction, and momentum of societal change. On this, this paper established the contribution of political marketing to women's empowerment for community development and gender equality. On this presupposition, this paper examined the effect of political marketing and its impact on community development via women empowerment strategies in Abia State. A study was carried out using a sample size of 900. Primary data for the study was collected using a 5-point Likert scale questionnaire. A simple regression model was utilised for the study. Crombach Alpha value of 0.74 was used to determine test-retest reliability. A simple regression model was utilised for the study. Crombach Alpha value of 0.74 was used to determine test-retest reliability. The study concluded that there is a significant relationship between political marketing and women empowerment strategies in Abia State. The study recommended using political packages, economic, education, social and agripreneurial women empowerment strategies for political marketing programmes to achieve community development in Abia State. These will help balance 'gender imbalances' as they pertain to welfare via community development in the state.
Keywords: Political Marketing, Women Empowerment, Community Development

INTRODUCTION
Marketing, especially in the contemporary world, has become so vast that its theories, principles, concepts and practices have cut across almost every endeavour. This is the fulfilment of the intellectual prophecy contained in the definition of marketing by Philip Kotler that 'marketing involves all human activities directed towards need identification and want satisfaction through an exchange process' (Kotler, 2000; Boniface *et al.*, 2007).

It is indubitable that innovation and strategy, or strategic innovation, is the substance of marketing which reflects adaptation to a dynamic environment. Therefore, political marketing should be dynamic to adapt and adjust to the nature, direction and momentum of change in the 'political market'. However, a market is the conglomeration of a product's relatively active and potential buyers (Anuforo& Boniface, 2013). Therefore, a *political market* is the constituency of the politician made up of the masses(the people or the electorates) that stand to benefit from the political activities of the candidate. Thus, the marketer should guard his or her market jealously, and the politician should try all he or she can to see that the general welfare of his or her constituency is protected, projected, and promoted.

Furthermore, this will help design political marketing activities that will influence the groups of citizens. Moreover, one group among these is women. Furthermore, excellent strategic grassroots political marketing can influence women's 'participation and empowerment for community development'.

Women's empowerment in community development is one of the most important studies, especially since the establishment of gender equality and women's empowerment as one of the main points of the Millennium Development Goals (MDGs). Investments with gender equality result in the highest returns that involve almost all the development scope (OECD, 2008).

Coming down to Nigeria, there is still discrimination against women in Nigeria; there are many cases of discrimination for women, which limits them from developing their potential. Generally, women are more involved in informal work compared to men. Women experience social threats, challenges, lack of a good working environment, and limitations in making opinions and decisions (Boniface & Israel, 2014).In order to promote growth and development in the broader community, there is the need for all good men and women, girls and boys, to have the opportunity to realise their potential and participate fully in all aspects of the life of the community (Klugman *et al.*,2014). However, the social and religious cultures of Nigeria,

like in Abia State, consider women to be 'physically weaker' than men and hence, women are limited to joining economic activities outside their homes (Boniface & Israel, 2014).

Empowering women is increasingly necessary to improve the conditions of vulnerable and marginalised groups. The situation of women, particularly in the third world and the developing countries, is not very encouraging (Boniface & Israel, 2014). They have fewer opportunities and less choice in making decisions in their lives. There are many reasons for the disempowerment of women in developing countries. One of the leading causes of underdeveloped communities is poverty. This requires studying the relationship between community development and women's empowerment because it is necessary to understand the concepts of "empowerment" and "development".(Boniface & Israel, 2014).

According to Rowlands (2015), power is commonly understood as the ability to control and influence others. The control of men over women and dominant social, political, and economic classes over marginalised groups is demonstrated. If women are continuously denied power and influence in society, they may internalise this lack of power. This leads to 'internalised oppression'. The marginalised women become used to it for survival in a dominant social, economic or political class. However, there is a need to tap into this group of people (the marginalised women) to identify their capacity to contribute to community development (Rowlands, 2015).

Community development is a political project that disrupts existing power relations. Despite some economic growth in Nigeria over the last 20 years, many people in Abia State have been left behind. In too many communities in Abia State, poverty persists, and economic growth has been accompanied by rising disparities in income and opportunities.

One of the major problems facing the women of Abia State and other communities in the state is the deprivation of the women's right to participate in their full capacity in religious, economic, political and social activities like their male counterparts. This hinders their ability to operate at full capacity in development projects in the local government areas, like every other local area (community). This has resulted in the challenge whereby their male counterparts control the affairs of their families in ways like preventing or sanctioning their wives from participating or partaking in some activities of women from Abia State and the local government areas. Some men whose wives are appointed or elected into leading or directing roles stopped their wives in such leadership positions, thereby compounding the problems of women's organisations in the local government areas of Abia State.

Much research has been carried out on this topic. Previous research has shown that 24% of women experience restrictions from their families to go to school, 30.40% become victims of early marriage, 53.60% are illiterate, and 20% have no knowledge of empowerment (Hossain, 2011). In fact, in Bangladesh, the potential of women to participate, especially in helping economic growth, is quite significant, almost up to about 50% of the population and almost counterbalance the population of men.

According to the Household Income and Expenditure Survey 2005 in Bangladesh (BBS, 2010), 25.1% of the population lives below the extreme poverty line. It fell to 17.6 % in 2010, indicating that poverty is increasing daily. However, among this large population, it is estimated that 28 million people live in poverty in Bangladesh (SHIREE, 2011). The majority of these populations are women. This needs to be confirmed by adding them to the national labour force to grow the country's development.

The concept of women's empowerment is used to understand what is needed to change the condition of women who still experience discrimination and poverty problems. In developing countries, there are many reasons for the helplessness of women. This control is exhibited by men over women, men over men, and social, economic and political class dominance over those who are less powerful. The term 'women empowerment' has become popular in land development since the 1980s. It is acknowledged that women's empowerment is needed for sustainable economic growth and poverty reduction (Chaudhary, 2009). However, more studies need to be done on the synergy between political marketing and women's empowerment for community development. It was on this intellectual gap that this paper is poised to study how political marketing can influence women's empowerment. Moreover, it thereby achieves community development in Abia State.

This study's findings will benefit some groups like women, researchers, government agencies, students and lecturers. Women will benefit from the research because it will help them quickly identify areas that give better empowerment and satisfaction among the plethora of substitutes. Moreso, the study will be limited to the potential effect of women's empowerment to investigate the effect of women's empowerment and community development in Abia State. The independent variables will comprise the dimensions of women's empowerment: political, economic, social, educational and agricultural. Community development as the dependent variable will be measured by creating job opportunities, attracting social amenities, increasing agricultural productivity, and balancing gender equality in the study area.

REVIEW OF LITERATURE

Political Marketing

Political marketing is the intellectual marriage between Politics and Marketing (Anyanwu, 2012). Early literature in political marketing (perceptions and viewpoints) limited political marketing to one marketing aspect: political marketing communications and promotional strategies. This work, however, seeks to enhance the synthesis of the early political marketing thinkers and to develop some modern thoughts, revolutionary theories and radical philosophies of and for political marketing. Based on this rationale, Harrop (1990) perceived political marketing as being not just about political advertising, party political broadcasting, and electoral speediness but also covering the whole area of party positioning in the electoral market. In their contribution, lock and Harris (1996) defined political marketing as a discipline, the study of the exchange processes between political entities and their environments and among themselves, with particular reference to the positioning of these entities and their communications.

In the same dimension, Stromback and Spiro (2010) in Anyanwu (2012) submit that Political Marketing is an "exchange process by which political organisations choose to build their actions and their products upon the needs and wants among chosen target groups and stakeholders in a manner seeking to serve different arenas or markets. Also, Kavanagh (1995, 1996) sees political marketing as an election earring: a set of strategies and tools to trace and study public opinion before and during an election campaign to develop campaign communications and assess their impact. A similar perception has been expressed by Maarek (1995), who conceptualises Political Marketing as a complex process, the outcome of a more global effort implicating all the factors of the politician's political communications. As an activity, however, Political Marketing is concerned with strategies for positioning and communications and the methods through which these strategies may be realised, including the search for information into attitudes, awareness and the target audience's response.

A second-order reflection of and on the above definitions is based on the definition of conventional or mainstream marketing by the American Marketing Association that 'envisaged' the concept of political marketing by incorporating the crucial word, *ideas*, in its redefinition of marketing in 1985. Thus, marketing is the process of planning and executing the concept, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organisational objectives (Boniface *et al.*, 2007). Moreover, based on the above backdrop, Political Marketing in this framework will cut across almost all conventional marketing areas. Such will give it a systematic methodology in integrating the *Africanization* and *Westernization* of Political Marketing to arm Modern Political Marketers with the requisite knowledge in this modern time. This systematic methodology should also reflect the eclectic nature of marketing.

This is because marketing, as said earlier, has borrowed most of its theoretical expositions from other disciplines, namely, Economics, Management, Anthropology, Psychology, Sociology, History, and most importantly, Political Science and Philosophy, including many others, which are subsumed into the framework of Political Marketing. Thus, a good Political Marketing Strategist should be a philosopher and Polymath who has approximately the knowledge of everything in political marketing and something in every other and related area of life, as these other areas serve missing links in the entirety of existential and liberation ideologies of not only political philosophy but also political marketing.

It is indubitable that innovation and strategy, or strategic innovation, is the substance of marketing which reflects adaptation to a dynamic environment. Therefore, political marketing should be dynamic to adapt and adjust to the nature, direction and momentum of change in the political market. However, a market is the conglomeration of a product's relatively active and potential buyers (Anuforo& Boniface, 2013). Analogically, therefore, a *political market* is the constituency of the politician that represents the masses, people or the electorates that stand to benefit from the political activities of the candidate. Thus, the marketer should guard his or her market jealously, and the politician should try all he or she can to see that the general welfare of his or her constituency is protected, projected, and promoted. It is on this philosophy that women's empowerment and its impact on community development was captured in this study.Then: What is women empowerment?

Women Empowerment Movement

The movement for women empowerment dates back to 1985 when a group of third world feminists who called themselves 'Development Alternatives with Women for a New Era (DAWN)' (Connely&Barriteau, 2010) were closely involved in the emergence of Gender and Development-GAD (Connelly *et al.*, 2010). DAWN demanded that she want a world where inequality based on class, gender and race was absent from every country and the relationships among countries. These women want a world where basic needs

become fundamental rights and poverty, and all forms of violence are eliminated so that each person will have the opportunity to develop her or his full potential and creativity. Women's values of nurturance and solidarity will characterise human relationships. In such a world, women's reproductive roles will be redefined such that childcare would be shared by men, women and society as a whole. By sharpening the links between equality, development and peace, we can show that the fundamental rights of the poor and the transformations of the institutions that subordinate women are inextricably linked. This can be achieved together through the self-empowerment of women (DAWN, 1985).

The Concepts of Power and Empowerment

The diversity in the conceptualisation of empowerment focuses on different aspects of women's lives. Each conceptualisation suggests a different way to achieve it, so one must clarify its meaning. Explaining the concept of power, She (2019) has questioned: Is power a property or a relationship? Is it potential or actual, a capacity or the exercise of a capacity? By whom, or what, is it possessed or exercised by agents (individual or collective?), structures or systems? Is it, by definition, intentional, or can its exercise be partly intended or unintended? Must it be (wholly or partly) effective? (She, 2019). Similarly, Datta& Kornberg (2012) ask questions such as, what is empowerment? Why empowerment? How to empower? Who to empower? All these questions have various answers. The answers may be even contradictory among different authors.

These disagreements are partly due to the differences in the concept of power, which underlies the notion of empowerment.

Power has been defined in the books of Sociology as "the chance of a man (woman) or several men (women) to realise their own will even against the resistance of others who are participating in the action." (Hindess, 2016 Macionis, 2014). Another reason for the confusion is that this word has been used in several empowerment-related projects to mean something else, like 'better health or increased income' (Mosedale, 2015). These are used as measures for assessing empowerment. Human beings conceive power as *something* we "have" or "lack," something we "use" to create a political effect on another actor" (Hayward, 2018).

Such definitions seem to be quantitative. For instance, these suggest that a gain of power by person A is a loss of power for person B. This conception is rooted in a conception of social life as competition and conflict-bound (Mosedale, 2015; Rowlands, 2017, 2019). The author calls it the 'power over' conceptualisation of power.

If we look at this definition from a gendered perspective, it would suggest that the delivery of power to women would be a loss of power for men. It may be due to the prevalence of the conception of power in such terms that women's empowerment has yet to be accepted wholeheartedly (Rowlands, 2017; 2019). The concept of power has also been viewed as 'power to', 'power with', and 'power from within(Rowland, 2017; Mosedale, 2015).

Women Empowerment

There are several agreements and disagreements among various authors on defining the concept of women's empowerment. Datta and Kornberg (2012) argue that women's empowerment occurs when individual and group efforts correspond with those of *agencies* (emphasis added).

The policies and programs that States and international Organisations undertake to alleviate the adversities that women face daily are well within the purview of empowerment. They do this by *enabling* (emphasis added) women to have more power over resources and decision-making. Here, empowerment is primarily focused on power as power 'within', with 'power to' and 'power with' as subsidiaries (Datta & Kornberg, 2012).

Furthermore, women's empowerment is taken as a process that involves shifting from a position of powerlessness towards achieving socio-economic and political participation. The role of international organisations and states may be questionable from a women's empowerment point of view. However, there is agreement among the scholars that empowerment in its simplest sense means 'enablement'. However, an average woman in a developing country may need to be in a position to 'enable' her to attain power over resources and have a say in decision-making. Therefore, an external agent (a state's department or another organisation) must facilitate women's empowerment by creating enabling conditions (Mosedale, 2015).

In a development context, then, empowerment starts with an emphasis on 'power within' at the individual (micro) level and shifts to 'power to' and 'power with' at economic and political (macro) levels, a kind of dynamic duo where power is taken at the individual and collective level at the same time (Kabeer, 2014, 2019; Moser, 2013). Hence, women's empowerment is a continuum involving a change at the individual social and political levels.

Individual and Socio-Political Orientations of Women Empowerment

Women's empowerment has also been viewed and discussed regarding individual/personal development and collective thinking as a group. According to Moser (2013), empowerment is "the capacity of women to increase their *self-reliance* and *internal strength*. This is identified as the right to determine choices in life and to influence the direction of change through the ability to gain control over material and non-material resources". Moser's focus on self-reliance and internal strength emphasises the significance of the individual.

However, Moser (2013), in explaining her view of empowerment, recognises that economic empowerment is a necessary but not a sufficient condition to address gender inequalities. She (2019) proposes transforming all the structures of subordination from family to state and global levels. To mobilise women resourcefully, a sense of self-confidence and self-esteem are essential. To mobilise women resourcefully, a sense of self-confidence and self-esteem are important.

Kabeer (2019) views empowerment as " the process by which those who have been denied the ability to make strategic life choices acquire such an ability." One of the most important things for this process of empowerment is 'power within' because only then can women develop an ability to control the resources (Kabeer, 2019). Recognition of women's experiences and analysis of the issues that subordinate women need to be focused on to initiate and develop this power from within seem to be on women's agency (Karl, 1995; Kabeer (2019).

She (2019) states that the traditional notion of measuring participation in quantitative terms meant development for women if more women were counted to be joining women's organisations at grassroots levels even if "they were simply passive recipients of development aid, without any voice in the design, implementation or monitoring and evaluation of the project" (p. 1). Against such an odd measurement of women's development, the main focus of Kabeer (2019) is on women's agency in the empowerment process. To make empowerment more than just participation in decision-making, Kabeer emphasises the inclusion of the processes that result in women's seeing themselves as capable and confident. However, the question is how to include or initiate such processes.

Kabeer (2019b) recommends that the process of empowerment must involve shredding the socially constructed negative selves by developing a sense of capacity and right to act in women. However, socially constructed self-image cannot be undone at an individual/personal level alone. Therefore, Kabeer (2019b) argues that women's empowerment must involve collective action to bring social and political empowerment.

Rowlands (2017) defines empowerment as "a process that involves some degree of personal development". She views empowerment as a three-dimensional phenomenon. Empowerment at the 'personal' level, which means "developing a sense of self and individual confidence and capacity" (Rowlands, 2019); it is also seen as a 'close relationship' which means "developing the ability to negotiate and influence the nature of the relationships and decision made within it" (Rowland, 2019); and empowerment at 'collective' level means " individuals working together to achieve more extensive impact than each could have had alone" (Rowlands, 2019). Her sequence of the empowerment process has to start from 'power within'. It emphasises the individual as a focal point in the process. However, it is difficult for women alone to change the gender conditioning and power structures. This calls for collective action. To develop confidence and conviction in self-initiative, women must get organised for collective action towards their empowerment. This is what Rowlands (2017, 2019) means by 'power with' and 'power to', i.e. in collaboration with each other, women with similar interests can work 'with' each other 'to' transform social and political structures for their betterment and attain a level of control which previously did not exist. By working and achieving these three processes in the empowerment process, the 'power over' structure can be challenged and moulded for an equitable social order.

Contrary to the conventional notion of women's empowerment as a bargaining process of a win-lose situation, it is seen as achievable within the existing social order without challenging or affecting the overall distribution of power. Empowerment processes initiated would translate into benefits for all, not just a few, and the empowered would become agents of development by becoming self-reliant (Mosedale, 2015).

Political Empowerment

The need for political empowerment of women becomes more significant in a development context where 'power within' cannot be very beneficial until women are made strong and empowered from a political point of view. Friedmann (1992) conceived power in social, political, and psychological forms. The psychological power or individual's power results from developments in social and political power. Social

power is meant to include skills and knowledge that, at the household level, enhance production and provide a basis for political power.

Political power, in turn, is understood as a mechanism to influence policies that determine micro and macro structures and processes. According to Friedmann (1992), collective action could influence political power. His notion of psychological power is similar to Kabeer's (2019) and Rowlands' (1997, 1999) conception of 'power within'; hence, it would include individual attributes of self-reliance and self-esteem.

Friedmann (1992) promotes the strategy of collective social power that can influence political power by influencing social policies. Once the political process of policy-making and legal structures are influenced, it would translate into personal empowerment or (in Friedmann's terminology) "psychological power".

Young (2013) also emphasised on political power. By political power, she means women taking "... control of their own lives, to set their agendas, to organise to help each other and make demands on the state for support and on society itself for change." It suggests that the way towards empowerment is through political change. Young (2013) justifies a "... need to transform women's position in such a way that the advance will be sustained". When women initiate political change, it will help them become empowered individually in their capacities. Hence, political empowerment is seen as necessary for individual and personal empowerment.

Rowlands (2017) also argues that women's empowerment in the form of greater control over the issues in their daily lives is necessary, but more important is their control over political structures. She does not view empowerment at the individual and political levels as related, so change at one level could influence and bring change at another level.

Instead, she gives primacy to women's involvement in political processes and gaining control of these macro-structures to initiate an empowering change at the individual level. It means organising women to achieve political power to influence the social fabric and seek individual women's empowerment. As I mentioned earlier, in a development context like Pakistan, political power seems more important for women as all the decision-making for women's issues is made at the political level. Women can forcefully exert their 'power within' if they are politically protected. These two concepts are interlinked, and both complement each other.

Gender Development and Women Empowerment

As the concept of empowerment has various meanings, the concept of gender in development literature is also subject to multiple meanings. It is due to differences in conceptualisations. Differences manifest because of different ideologies and value systems in organisations. For example, the World Bank is economically focused, and Action Aid and other such organisations have a rights-based approach (Warren, 2007). However, in an attempt to put together the commonly agreed assumptions in GAD discourse, I may summarise its distinctive features. Firstly, the focus is on gender and global inequalities; to alleviate inequality, it sees women as active agents, not passive recipients. Secondly, to analyse inequality and inequity, it looks holistically at all the sectors of social life and indices of the diversity of both genders.

Thirdly, to emancipate the marginalised, especially women, politically and economically, it views their organisation at the grassroots as a prerequisite for initial input for change. However, they cannot move forward due to poverty and other social constraints. So, there is a need for conscience-raising at the grassroots level along with poverty alleviation. Finally, GAD stands for anti-poverty, welfare, and equity approaches as complementary rather than distinct (Beetham & Demetriades, 2007).

The women's empowerment framework sees empowerment in "five 'levels of equality', which indicate the extent to which women are equal with men" (March *et al., 20*19). In descending order of importance, these levels of equality are welfare, access, conscientisation, participation and control (March *et al. 20*19: 93; Karl, 1995). Certain aspects of this framework align with GAD's overall perspective.

Firstly, the women empowerment framework (as well as other frameworks) does not measure women's empowerment at macro-levels; instead, it is a micro-level analysis. Secondly, the way it divides women's equality into five levels suggests that it focuses on analysing the type and level of 'welfare' first and considers women's level of awareness and political empowerment later. This is in congruence with Rowlands (2017).

Kabeer's (2014) and Moser's (2013) conception of empowerment starts from 'power within' and extends to 'power to' and 'power with'. Being from a developing country, I do not see women's participation in political activities possible in circumstances where the entrenched socio-cultural practices and poor economic conditions would hardly let them even realise their "being and doing" (Mosedale, 2015).

Economic Empowerment

Economic empowerment is the capacity of women as well as men in order to participate in, contribute to help and benefit via growth processes with measures which know one signal connected with their contributions; respect is dignity as well as makes it possible to negotiate the fairer distribution involving the benefits of growth (Eyben *et al.*, 2013).

Economic empowerment increases women's access to economic resources and opportunities, including jobs, financial services, property, productive assets, skills development, and market information. Women's economic participation and empowerment are fundamental to strengthening women's rights and enabling them to control their lives and influence society (Eyben *et al.*, 2013).

Women's economic power further enhances the current < UNK> wealth " and < UNK> well-being" of nations. Negash (2016) states that women who control their cash tend to have fewer children, and fertility rates are inversely related to national income growth. Women are also more willing than their male counterparts- to send daughters and sons to school, even when they earn less than men. Another host of studies indicates that putting earnings inside women's hands is the intelligent thing to do to speed up development along with the program of overcoming poverty.

Women usually reinvest a much higher segment throughout the families and communities than men, spreading wealth beyond themselves. Economic empowerment regarding women is usually a prerequisite for sustainable development, pro-poor growth, and the achievement associated with the Millennium Development Goals (MDGs). Gender equality and empowered women tend to be catalysts for multiplying development efforts. Investments with gender equality yield the highest returns involving just about all development investments (OECD, 2008).

Women usually invest a higher proportion connected with income throughout their families and communities than men. A previous study throughout Brazil showed how the likelihood of the child's survival increased from 20% as soon as the mother controlled household income.

Including more women in the workforce could significantly impact increasing the incomes of low-income households. This is not surprising. This raising female participation in labour stress is a policy goal in Bangladesh. Women's participation in the workplace, leadership roles in the political and social arenas and admittance to credit are regarded as empowerment involving women. Women's empowerment would reflect gender equality, the precursor for shipping one's country forward towards middle funds status and inclusive and sustainable development.

Social Empowerment

Social empowerment is the system of accessing possibilities and resources to make individual choices and control our environment, such as education, health, nutrition, safe water, sanitation, housing, shelter, and science and technology. It is all about carrying out ways to help change society, and so it is one's place inside that is respected and taken to the terms that the person and a group want in order to live, not at terms dictated by others.

The sense of autonomy and self-value can be an essential and direct contributory factor intended to enable someone to participate in politics and get optimum advantage involving services, including health and education. On the other hand, economic empowerment enables marginalised people to think beyond immediate daily survival and assert greater control over their resources and life choices, especially decisions with investments in health, housing and education. Women are also desired from an ideal point of view in the decision-making process, which is very important in the context of the country's balanced development (Islam, 2016).

Human capabilities, like decent health and literacy, offer anyone the freedom to engage in economic activities and participate in political and social life (Sen, 2019). Capability for knowledge incorporates not only a single skill but also a significant self-awareness. In addition to new knowledge, empowerment is usually an interactive process in which people's growing awareness of the changes they want in their lives stimulates them to seek knowledge and information.

Theoretical Framework

This study is founded on two theories. They are functional theory and conflict theory. These theories are discussed below.

The Theory of Functionalism

The theory of functionalism is a social science theory. Talcott Parson developed it in the 1940s and 50s. The theory posits that all societal components serve a purpose and are necessary for long-term survival. Functionalism emphasises the crises and other forces that exist in society, focusing on social stability and shared values. Therefore, disorganisation in the system, such as deviant behaviour, which leads to change, is necessary because societal components must adjust to achieve stability.

The Theory of Conflict

This theory was developed by Karl Max in 1848 in his book, "The Communist Manifesto". This theory has been popularised since then. This theory suggests that conflict is an integral part of social life. Conflict exists between different groups, such as economic classes, ethnicities, ages, and genders. These conflicts focus on the competition between these groups within the society. Conflict theory views social and economic institutions as tools of the struggle between groups or classes. These conflicts maintain inequality and the dominance of the ruling class. Based on the above premises, this work adopted the theory of conflicts.

This work utilises the theory of functionalism, which is based on the idea that all parts of a society function together through institutions, roles, norms, and other elements that have specific purposes, critically important for the society's long-term survival. This implies that a viable society cannot be actualised without a systemic approach to the general contributions of the diverse aspects of these functions.

Empirical Review

Much research has been carried out on this topic. Previous research has shown that 24% of women experience restrictions from their families to go to school, 30.40% become victims of early marriage, 53.60% are illiterate, and 20% have no knowledge of empowerment (Hossain, 2011). In fact, in Bangladesh, the potential of women to participate, especially in helping economic growth, is quite significant, almost up to about 50% of the population and almost counterbalance the population of men.

According to the Household Income and Expenditure Survey 2005 (BBS, 2010), 25.1% of Bangladesh's population lives below the extreme poverty line. It has fallen to 17.6 % in 2010, indicating that the poverty situation is increasing daily. However, among this large population, it is estimated that 28 million people live in poverty (Shree, 2011). The majority of these populations are women. This needs to be confirmed by adding them to the national labour force to grow the country's development.

The conception of political marketing, especially for women's empowerment, is used to understand what is needed to change the condition of women who still experience discrimination and poor problems. In developing countries, there are many reasons for the helplessness of women. Men over women exhibit this control, men over men, and by social, economic and political class dominant over those who are less powerful. The term "women empowerment" has become popular in land development since the 1980s. It is acknowledged that women's empowerment is needed for sustainable economic growth and poverty reduction (Chaudhary, 2009).

METHODOLOGY

This study used the personal interview and survey design. This included sampling the opinions of selected women in Abia State. Adequate care was taken to ensure that the sample was both relevant and representative of the view wanted. The study was carried out in Abia State. This was determined through a multi-stage random sampling method, whereby the state was divided into three senatorial zones. From each of these zones, 2 communities were selected.

Moreover, 100 women were selected from each community. Primary data for the study was collected using a 5-point Likert scale questionnaire. A simple regression model was used for the study. Crombach Alpha Model was used for test-retest reliability.

The research instrument's reliability will be tested through test-retest content reliability, focusing on the questionnaire's capacity to elicit the respondents' opinions. In the course of this, ten (10) copies of the questionnaire will be administered to my colleagues. A correlation model will be adopted to test the capacity of the questionnaire to generate data for the study. The test-retest results will be presented herein. Moreover, the decision will be based on the Crombach Alpha Model. The formula for the Cronbach Alpha Model is stated thus:

$$\propto = \frac{N * \bar{C}}{\bar{V} + (N-1) * \bar{C}}$$

Where:

N = Number of Items.

$\bar{C}$ = Average co-variance between pairs.

$\bar{V}$ = Average Variance.

The results of the pre-test and post-test will be 10 presented in Tables. And the result of **.74 will be accepted**

At 95 confidence level (5% significant level).

Measurement Of Variables

The study's variables were measured using a 5-point Likert Scale Descriptive Index. This will be adopted and modified for data collection for the study. Thus, respondents will be instructed to indicate by ticking to the extent they agreed or disagreed with statements stated in the questionnaire. Their responses will be rated using a five (5) point rating system as follows: SA – 5 (Strongly Agree); A-4 (Agree); D-3 (Disagree); SD-2 (Strongly Disagree) and U-1 (Undecided). Efforts will be made to ensure clarity and brevity in item construction.

RESULTS AND DISCUSSIONS

$H0_1$: There is no significant relationship between political empowerment of women and infrastructural facilities in Abia State.

Table 3: Model Summary of the simple regression of political empowerment strategy on attracting infrastructural facilities in the study area

Model	R	R-Square	Adjusted R-Square	Standardised error of estimate	Durbin Waston
1.	**.701**	**.611**	**.606**	**.594**	**.010**

a. Predictor: (Constant) **political empowerment strategy**

b. Dependent variable, **attracting infrastructural facilities**

To test the third hypothesis, simple regression was also used to regress the independent variable against the dependent variable to make our prediction. Table 3 above indicates the model summary of the simple regression equation that predicted the capacity of women to attract infrastructural facilities. The explanation of the values is presented in Table 4.24 below.

Table 4: Coefficients of regression of attracting infrastructural facilities

Model	Unstandardised coefficient	Standard error	Standardised Coefficient	t.	sig.
political empowerment strategy	5.492	.541		89.677	.000
	.318	.003	.810	49.371	.000

Dependent variable: attracting infrastructural facilities

The values presented in Table 4 above summarised the test of the first hypothesis. The intercept (β_0) value indicates that the sales volume value, when all the explanatory variables are zero, is 2. Specifically, a one per cent change (improvement) in political empowerment activities leads to a 21.8% increase in the capacity of women to attract infrastructural facilities in Abia State. Hence, we reject the null hypothesis and instead accept the implied alternative that there is a significant relationship between the political empowerment of women and the attraction of infrastructural facilities in Abia State.

Ho_2: There is no significant relationship between economic empowerment of women and growth of small scale enterprises in Abia State.

Table 5: Model Summary of the simple regression for economic empowerment of women on the growth of small-scale enterprises in Abia State

Mode	R	R-Square	Adjusted R-Square	The error of the estimate	Durbin-Waston
1	.975	.951	.914	.488	.034

a. Predictor: (Constant) **economic empowerment of women Strategy**

b. Dependent variable: **growth of small-scale enterprises**

To test the hypothesis, simple regression was used to regress the independent variable against the dependent variable. Tale 5 above indicates the model summary of the simple regression equation that predicted the growth of small-scale enterprises. The explanation of the results is presented in Table 5, as given below.

Table 6: Coefficients of regression of economic empowerment of women strategy on growth of small-scale enterprises

Model	Unstandardised coefficient		Standardised coefficients	T	Sig	sig.
	β	Std Error	Beta .	26.001	26.001	.000
1 Constant economic empowerment of women Strategy	1.724		.077			
	.683		.004	214.545	214.545	.000

The model summary table (Table 6) provides valuable information about the regression analysis of the second hypothesis. The intercept (β_0) value of 1.812 in Table 6 indicates that the value of growth of small-scale enterprises when all the explanatory variables are zero is 1.812. Specifically, a one-cent increase in the improvement rate in women's economic empowerment demonstrates the growth of small-scale enterprises by 67.3%. Hence, improvement in women's economic empowerment has a positive significant effect on small-scale enterprises' growth. However, we reject the null (Ho_2) hypothesis and accept the implied alternative that there is no significant relationship between economic empowerment of women and growth of small scale enterprises in Abia State.

Ho_3: There is no significant relationship between education empowerment of women and creation of job opportunities in Abia State.

Table 7: Model Summary of the simple regression of education empowerment of women and creation of job opportunities in Abia State

Model	R	R-Square	Adjusted R-Square	Error of the estimate	Durbin-Waston
1	.938	.938	.910	.454	.030

a. Predictor: (Constant): Education empowerment of women

b. Dependent variable: Creation of job opportunities in Abia State

To test the hypothesis, simple regression analysis was used to regress the independent variable against the dependent variable. Table 7 above indicates the model summary of the simple regression equation that predicted the creation of job opportunities. The explanation of the results presented in Table 7 is given below.

Table 8: Coefficients of regression of creation of job opportunities in Abia State

Model	Unstandardised coefficients	Standardised coefficients		t.	Sig.
	β	Standardized Error	βeta		
1 constant	1.862	.080		24.001	000
Education empowerment of women	.785	0.050	.869	241.400	001

a. **Dependent variable: Creation of job opportunities in Abia State**

The model summary table (Table 8) provides useful information about the regression analysis for the third hypothesis. The intercept (β_0) value indicates that the sales volume value when all the explanatory variables are zero is 1.862. Specifically, a one per cent change (improvement) in education empowerment of women's activities increases the creation rate of job opportunities in Abia State by 78.5%. Hence, we reject the null hypothesis that there is no significant relationship between education empowerment of women and creation of job opportunities in Abia State. Moreover, accept the implied alternative that a significant relationship exists between women's education empowerment and job opportunities in Abia State.

Ho4: There is no significant relationship between social empowerment of women and gender balance in Abia State.

Table 9: Model Summary of the simple regression for social empowerment of women in the study area

Mode	R	R-Square	Adjusted R-Square	Error of the estimate	Durbin-Waston
1	.975	.951	.914	.488	.034

a. **Predictor: (Constant): Social empowerment of women**
b. **Dependent variable: Gender balance**

To test the hypothesis, simple regression was used to regress the independent variable against the dependent variable. Tale 9 above indicates the model summary of the simple regression equation that predicted sales volume. The explanation of the results is presented in Table 10, as given below.

Table 10: Coefficients of regression of social empowerment of women on gender balance in the study area

Model	**Unstandardised coefficient**		**Standardised coefficients**	**T**	**Sig**	sig.
	β	Std Error	Beta .	26.001	26.001	.000
1 Constant Social empowerment of women	1.724		.077			
	.683		.004	214.545	214.545	.000

Dependent Variable: Gender balance

The model summary table (Table 10) provides helpful information about the regression analysis of the second hypothesis. The intercept (β_0) value of 1.812 in Table 10 indicates that the sales volume value when all the explanatory variables are zero is 1.812. Specifically, a one per cent increase in the rate of improvement in social empowerment of women increases the rate of gender balance by 67.3%. Hence, the social empowerment of women has a significant positive effect on gender balance in Abia State. However, we reject the null (Ho_4) hypothesis that there is no significant relationship between social empowerment of women and gender balance in Abia State. Furthermore, it would rather accept the implied alternative that there is a significant relationship between the social empowerment of women and gender balance in Abia State.

Ho_5: There is no significant relationship between agripreneurial empowerment of women and agricultural productivity in Abia State.

Table 11: Model Summary of the simple regression for agripreneurial empowerment of women and agricultural productivity in Abia State

Mode	R	R-Square	Adjusted R-Square	Error of the estimate	Durbin-Waston
1	.975	.951	.914	.488	.034

a. Predictor: (Constant), **agripreneurial empowerment of women Strategy**
b. Dependent variable: **agricultural productivity in Abia State**

To test the hypothesis, simple regression was used to regress the independent variable against the dependent variable. Tale 11 above indicates the model summary of the simple regression equation that predicted sales volume. The explanation of the results is presented in Table 12, as given below.

Table 12: Coefficients of regression of agripreneurial empowerment of women strategy on growth of small-scale enterprises

Model	Unstandardised coefficient		Standardised coefficients	T	Sig	sig.
	β	Std Error	Beta .	26.001	26.001	.000
1 Constant Agripreneurial empowerment of women	1.724		.077			
	.683		.004	214.545	214.545	.000

The model summary table (Table 12) provides valuable information about the regression analysis of the fifth hypothesis. The intercept (β_0) value of 1.812 in Table 12 indicates that the value of agricultural productivity when the entire explanatory variables are zero is 1.812. Specifically, a one per cent improvement in the rate of improvement in agripreneurial empowerment of women increases agricultural productivity in Abia State at 67.3%. Hence, improvement in agripreneurial empowerment of women has an effect on agricultural productivity in Abia State. However, we reject the null (Ho_5) hypothesis and accept the implied alternative that there is no significant relationship between agripreneurial empowerment of women and agricultural productivity in Abia State.

Discussions

The summary of the major findings of this study is highlighted below.

The first hypothesis, which states that there is no significant relationship between the political empowerment of women and infrastructural facilities in Abia State, was tested using simple regression. The intercept (β_0) value indicates that when all the explanatory variables are zero, the value of attracting infrastructural facilities is 2. Specifically, a one per cent change (improvement) in political empowerment activities leads to a 21.8% increase in the capacity of women to attract infrastructural facilities in Abia State. Hence, we rejected the null hypothesis and accepted the implied alternative that there is a significant relationship between the political empowerment of women and the attraction of infrastructural facilities in Abia State. The model summary in Table 16 provided helpful information about the regression analysis of the second hypothesis. The intercept (β_0) value of 1.812 indicated that the value of growth of small-scale enterprises when all the explanatory variables are zero is 1.812. Specifically, a one-cent increase in the improvement rate in women's economic empowerment demonstrates the growth of small-scale enterprises by 67.3%. Hence, improvement in women's economic empowerment has a positive significant effect on small-scale enterprises' growth. However, we rejected the null (Ho_2) hypothesis. We accepted the implied alternative that there is no significant relationship between economic empowerment of women and growth of small scale enterprises in Abia State. The study provided valuable information about the regression analysis for the third hypothesis. The intercept (β_0) value indicates that the value of creating job opportunities when all the explanatory variables are zero is 1.862. Specifically, a one per cent change (improvement) in education empowerment of women's activities increases the creation rate of job opportunities in Abia State by 78.5%. Hence, we rejected the null hypothesis that there is no significant relationship between education empowerment of women and creation of job opportunities in Abia State. Moreover, it accepted the implied alternative that there is a significant relationship between the education empowerment of women and the creation of job opportunities in Abia State.

The model study also provided helpful information about the regression analysis of the fourth hypothesis. The intercept (β_0) value of 1.812 indicated that the value of gender balance when all the explanatory variables are zero is 1.812. Specifically, a one per cent increase in the rate of improvement in social empowerment of women increases the rate of gender balance by 67.3%. Hence, the social empowerment of women has a significant positive effect on gender balance in Abia State. However, we rejected the null (Ho_4) hypothesis that there is no significant relationship between social empowerment of women and gender balance in Abia State. Moreover, it accepted the implied alternative that there is a significant relationship between the social empowerment of women and gender balance in Abia State.

The model study provided helpful information about the regression analysis of the fifth hypothesis. The intercept (β_0) value of 1.812 indicated that the value of agricultural productivity when all the explanatory variables are zero is 1.812. Specifically, a one per cent improvement in the rate of improvement in agripreneurial empowerment of women increases agricultural productivity in Abia State at 67.3%. Hence, improvement in agripreneurial empowerment of women affects agricultural productivity in Abia State. However, we rejected the null (Ho_5) hypothesis and accepted the implied alternative that there is no significant relationship between agripreneurial empowerment of women and agricultural productivity in Abia State.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions were drawn from the findings. There is no significant relationship between political empowerment of women and infrastructural facilities in Abia State. There is a positive significant relationship between women's economic empowerment and the growth of small-scale enterprises in Abia State. There is a positive significant relationship between the education empowerment of women and the creation of job opportunities in Abia State. There is a positive significant relationship between the social empowerment of women and gender balance in Abia State. There is a positive significant relationship between agripreneurial empowerment of women and agricultural productivity in Abia State. Therefore, the study recommends that there should be an improvement in the political empowerment of women in Abia State. This is because it will help attract infrastructural facilities in the state. Also, the need for women's economic empowerment; such will enhance the growth of small-scale enterprises in Abia State. In addition, the study recommends that there is an urgent need for education and empowerment of women, as it will help to create job opportunities in the state. Social empowerment of women should be encouraged in Africa. This will help bridge the gender imbalance in Abia State. Finally, entrepreneurship programs that empower women in agriculture, such as fish farming, poultry, pig farming, and baking, should be promoted and encouraged. These will boost agricultural productivity among women and contribute to their capacity to better their welfare, families and relative communities in Abia State.

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INVESTIGATING THE EFFECT OF ENTREPRENEURSHIP ON POVERTY REDUCTION

Onyendi, Hilary U., Alamba, Chukwuma S., Osuji, John I. and Chukwu, Agnes U
Michael Okpara University of Agriculture Umudike.
Corresponding author: hilluch2008@yahoo.com

ABSTRACT
The study investigated the effect of entrepreneurship on poverty reduction in Nigeria for a time period of 1981 to 2022. The objective of the study is to empirically answer the question- Has entrepreneurship reduced poverty in Nigeria?, within the period under review. Over the years, there has been an unprecedented proliferation of entrepreneurial ventures in the country while the poverty level is escalating. Debates on this worrisome development have generated controversies both in empirical and theoretical research. Despite the numerous entrepreneurial participation, poverty level appears to have degenerated as the per capita income is low, high level of unemployment, poor living standards, illiteracy and other poverty- related issues are prevalent in the country and as such calls for investigation. The source of data is secondary obtained from the Statistical Bulletin of the Central Bank of Nigeria of various issues. Both descriptive (mean, median, mode, kurtosis, standard deviation) and econometric tools were adopted for analysis. The econometric tools used are the unit root tests, the autoregressive distributed lag and the Granger causality tests. Findings indicate that; there is a long run relationship between entrepreneurship and poverty reduction; there is no causal relationship between entrepreneurship and poverty reduction. The entrepreneurship participation has not driven poverty reduction. The paper concludes that entrepreneurship has not driven on poverty alleviation. It has contributed insignificantly in reducing poverty. This implies that poverty can only be reduced if there is a boost on entrepreneurship in the form of incentives, tax holidays, infrastructural provision and economic policy frameworks that are friendly to business ventures, low inflation trends and others. The recommendations among others include that government should put in place initiatives and policy framework that will engender entrepreneurship participation
Keywords: Entrepreneur, entrepreneurial development, poverty, Poverty index, poverty reduction

INTRODUCTION

Poverty has generated a great deal of concern and challenge to Nigeria and a big clog in the wheel of economic development as no country can prosper amidst daunting face of poverty. Poverty is characterized by high level of employment, low per capita income, low lifestyle in quality living, diseases, sickness, poor health, poor educational, social and economic facilities. Brandshaw, (2006) added that poverty is a person unable to pay for basic human necessities and needs of food, shelter and clothing.. Hence, poverty implies a state of insufficiency in income to meet minimum required consumption of goods and services. The definition of poverty may vary slightly from one place to another, but in the literature, certain concepts have been made universal; they are absolute poverty, relative poverty and poverty line. United Nations, (1995) states that absolute poverty means a situation dominated by acute deprivation of basic human needs, such as food, safe drinking water, sanitation facilities, health, shelter, education and information. It is dependent not only on income rather on access to services. Relative poverty is the comparison of income and standard of living in a particular society which may be different from another society. Davis and Martinez, (2014) posit that poverty line is the lowest level of income in the measurement of penury.
World Bank (2015) has opined monetary measurements of poverty and absolute/extreme poverty for uniformity and for international measurement. A person is poor if he/she lives on $1.90 dollar per day (reduced from #2 per day in, but extremely poor if he/she lives in $1.25 per day which is the international poverty line. However, this situation prevails in the country and globally over the years. A possible way to tackle the concept of poverty is through entrepreneurship.
Entrepreneurship is French word that means running a business and taking risks. Stokes, Wilson and Mador, (2010) assert that various researchers, authors and economists have defined entrepreneurship in many ways and such these definitions could be categorized into three thus: process, behavior and outcome. Entrepreneurship no doubt remains vital as driving force for economic growth in any nation including Nigeria. Empirical evidences have shown that they contribute to employment, alleviate poverty

and increase productivity level various economies. Theoretically, the Innovation theory of entrepreneurship asserts entrepreneurship is the driving factor for the production of goods and services. Therefore, in view of the remarkable role of these entrepreneurial outfits in the economic growth process of Nigeria, government appears not to have taken deliberate efforts to improve on the growth of these enterprises towards triggering entrepreneurship. The entrepreneurial outfits can be in form of small scale enterprises (SSEs), medium scale enterprises. All these are important to the nation's industrialization process. All these will no doubt reduce poverty.

The National Bureau of Statistics NBS (2022) has disclosed that 133 million Nigerians are multi-dimensionally poor. In the latest National Multidimensional poverty Index report, the Nigeria Bureau of Statistics (NBS) said that 63 million Nigerians were poor as a result of lack of access to healthcare, education, living standards, employment and insecurity. This is amidst of a seemingly large entrepreneurial outfits scattered over the lengths and breaths of the country, that ought to reduce poverty. This calls for investigation. Therefore, this study has the objective of investigating the effect of entrepreneurship in alleviating poverty in Nigeria within the reviewed period.

The study is vital to literature. Although there has been progress in the study effect of entrepreneurship on poverty, the understanding of such effect on an individual remains inadequate. It also becomes more pronounced as study of such topic will provide and construct policy rules to the economic managers while also providing a basis for future researchers on the topic. Again it bridges the vacuum of scanty research on this topical issue.

LITERATURE REVIEW

Poverty Reduction

The concept, measurement and features of poverty have a historical origin. The Thought of poverty can be traced back to the codification of poor laws in the medieval England. This continued until the pioneering empirical studies at the turn of the century by Booth in London and by Rowntree in New York. The work by Rowntree published in 1901 was the first to establish and develop poverty standard for an individual families based on the estimates of nutrition and housing. However this got more concerns up till the 1960's when the standard for poverty measurement included level of income, reflected in the macroeconomic indicators such as the gross domestic product, inflation level, level of full employment and the balance of payments. Poverty reduction entails efforts geared towards reducing, eradicating, decreasing and curbing poverty. No country can survive when this cankerworm is ravaging its citizens.

Entrepreneurship

Entrepreneurship is synonymous with self employment and resorting to self- help to circumvent the vagaries of poverty, unemployment and income inequality. The failure of government to provide employment and basic necessities for the people to reduce poverty has made people to find ways of helping themselves. This is by way of producing goods and services and engaging activities that provide employment. The *a priori* expectation of the study is that poverty reduction should be driven by entrepreneurship. This is so since entrepreneurship is synonymous to growth.

Theoretical Literature

The study is based Innovation theory of entrepreneurship. It was propounded by Joseph Schumpeter in 1934. It asserts that entrepreneurship is the driving hub for producing goods and services. When goods and services are produced, exchange is facilitated, income is generated, employment is created and poverty is reduced. Mishra and Zachary, (2015) emphasized that the entrepreneur is an innovator concerned with introducing and bringing out new commodities, new markets, new primary product supply and the establishment of new firms. Simpeh, (2011) opines that entrepreneur creates new things through organizing factors of production which are land, labor and capital, he may not be the owner of a particular enterprise and as such he is assumed not to bear the business risks. The theory suggests that the entrepreneur is an engine of growth and therefore it should drive poverty alleviation in any economy if fully harnessed.

Empirical Literature

Oghojafor *et al.* (2011) in the study on entrepreneurship as intervention strategy to poverty alleviation in developing countries using questionnaires and regression analysis found that entrepreneurship has positive impact on poverty. It suggested that entrepreneurship skills should be developed. Ogundele *et al.* (2012) studied entrepreneurship training and education as strategic tools for poverty alleviation in Nigeria adopted questionnaire on five local government areas in Lagos State using regression analysis. Results depict that entrepreneurship training has positive with youth empowerment. Ibitoye (2015) examined the

impact of training and education on poverty reduction in Nigeria. The study found that entrepreneurship training has positive effect on poverty alleviation.
Kareem (2015) investigated the impact of entrepreneurship on poverty reduction adopting the chi –square test. Results show the evidence that entrepreneurship has a positive impact on income level and by extension the poverty alleviation. It suggested that more awareness on entrepreneurship be created.
Ahmed (2013) identified the determinants of poverty alleviation, using questionnaire administered on 360 households heads in Kano state. It found that education, age, occupation, and households' size has positive effect on poverty reduction. Adebayo (2015) examined the impact of micro and small scale business (MSBE) entrepreneurship on poverty reduction in Ibadan metropolis of Nigeria. The study adopted questionnaire and Logit regression analysis. It found that there is an insignificant effect of MSBE in poverty reduction. It suggested government should empower the enterprises in financial terms and the need for improvement of infrastructures.

METHODOLOGY

The Nigeria data spanning from 1970 to 2021 was employed for analyzing data. The study ascertains the effect of entrepreneurship on poverty reduction in Nigeria. Data is collected through secondary sources – statistical bulletin of the Central Bank of Nigeria (CBN) of various issues. The dependent variable is the poverty reduction, proxy by gross domestic product per capita or the per capita income PCI. It is the income per head an individual gets from the GDP at a given period usually per annum. It is a measure of the level of prosperity or poverty in the economy. A higher PCI is an indicator of prosperity while a low PCI portends poverty.
The explanatory is the entrepreneurship indicators. The variables are the private sector deposits to the commercial banks including the individuals and businesses. This depicts the level of poverty ravaging the economy if the figures are low and vice versa. Therefore a high level of such deposits implies poverty reduction as this has an inverse relationship with poverty. It is expected to have a positive effect on reducing poverty. It is proxy as PSD. The next is the private sector savings depicted as PSSv.. Savings is the difference between income and consumption. It is the left over when expenditure is deducted from total income. A higher figure implies poverty reduction or prosperity. It is expected to reduce poverty. Then we have two more controllable variables- Inflation and unemployment rate. These two variables depict the government role and policy position on the economy that has direct influence on poverty. These two variables are the major objectives of the macroeconomic policy comprised of monetary and fiscal policies.
The unemployment rate depicted as UNE. The higher the level of unemployment, the higher the poverty since, unemployed people has to effective demand that boosts the economy. This variable is a sign of poverty and remains an indicator of poverty. The next is inflation proxy as INF. Usually, high inflation rate triggers poverty. The two controlled variables- inflation and unemployment depict the role of government in energizing entrepreneurship. When the monetary and fiscal policies tame the soaring inflation and reduce the unemployment rate, entrepreneurship will strive and boosted. Therefore government policies may either reduce and or trigger poverty.
The tool adopted is the Ordinary Least Squares (OLS) time series data. In the first place, we performed the Augmented Dickey Fuller ADF unit root test URT to ascertain if the variables have unit root. This is to avoid the simultaneity bias inherent in the time series data. When the variables survive this test by rejecting the null hypothesis of unit root, we go further to perform the co integration test.
The following augmented model is formulated:

$$L\Delta\, LPCI = \beta_0 + \beta_1 LPSD + \beta_2 LInf + \beta_3 LUnE + \beta_4 \beta_4 LPSC + \beta_5 PSSv + t \ \ldots \qquad (1)$$

where,
PCI is proxy for poverty reduction. It is the gross income per capita or the per capita income, LPSD =the private sector deposits with the deposit money banks, LInf = Inflation , LUnE Unemployment rate (the controlled variables), LPSC= the private sector consumption, LPSSV= the private sector savings.
L = log , β_0 = constant, β_1, β_2 = explanatory power of the variables, t = stochastic error term.

Procedure

In order to achieve the objective of the study which is to ascertain the effect of entrepreneurship on reducing poverty , both in size and magnitude in Nigeria within the period under review, the following tests were employed- descriptive tests- mean, median, standard deviation, kurtosis, probability among others. Then the econometric test- the unit root test (URT), the Augmented Dickey Fuller (ADF), the correlation test, the autoregressive distributed lag test and the Granger causality tests.

The Augmented Dickey Fuller (ADF) unit root test was employed to test the stationary of the variables The Augmented Dickey Fuller (ADF) unit root test was employed. The decision rule is as follows- if the critical value (table value) is greater than the calculated t-ratio, the null hypothesis of unit root (non stationary) is not accepted implying that the level of time series X_t is characterized as integrated of order zero i.e. I (0). Conversely if the individual time series in the equation are integrated of order one I(1), that is when the critical value (table value) is lesser than the calculated t-ratio then the series is said to be non stationary. If the variables are integrated of the same order I(1), we run the Johansen (1991) co integration test procedures to test the co -integration among the variables.
This is depicted as

$$\Delta X_t = \alpha_o + \alpha_1 t + \beta X_{t-1} + \sum_{j=1}^{m} Y_j \Delta X_{t-j} + \mu_1 \quad \ldots (2)$$

where,
X_t is integrating series (independent variable), β is coefficient, Yj is integrating series (dependent variable), Δ is the first difference operator; t is the time trend; α_o is a drift; $_t$ represents the linear time trend; m is the lag length; μ_1 is a white noise process.

Correlation test

Correlation analyses also called bi-variate typically concerns with ascertaining if there is an existing relationship between variables and then determine the magnitude and size of such relationship. It measures the strength of the linear relationship existing between these variables.

Autoregressive distributed Lag

While co-integration techniques is used to determine the long run relationship between time series that are non stationary, sometimes, time series create an error correction model for short run dynamics and long ru relationships among the variables. The ARDL developed by Pesaran *et al.* (2001) for the investigation of long run relationship among the variables has some merits. It is most suitable for small samples. It is also more flexible in view of whether variables are integrated in I(1) or levels order I(0). However it is not applicable if they are integrated of I(2). That is why the unit root test is performed in the first place to circumvent the application of the ARDL if variables are integrated of I(2). Also the ARDL is more valid when sufficient number of time lags is gotten. It also settles the problems that may arise between the dependent and independent variables including autocorrelation and endogeneity.
The ARDL, (p,q) model specification is given as-
The model is:

$$\Delta Y\gamma = \alpha_1 + \vartheta Trend + \sum_{i=0}^{n} \gamma_1 \Delta L X_{t-i} + \sum_{i=0}^{n} \Psi i \Delta LX_2 t_{-1} + \sum_{i=0}^{n} W_1 \Delta LX_{3\,t-i} + \sum_{i=0}^{n} W \Delta LX_{n\,t-i} + \ldots + \ldots + \Theta_2 LYF_{t=1} + \delta N \in + \Delta\pi + \epsilon_t \quad \ldots (3)$$

We use the log transformed variables to estimate the long run impacts, such that the impacts can be interpreted as elastic. If the impact is greater than 1, it is more elastic, if it is equal to 1, it is elastic, it is between 0 an1 it is inelastic. The ECT is the error correction term.
However, the short run and the long run impacts are captured by different parameters in the above equation. The short run impacts in the variables in the equation 1 are giving as γ, W, δ while the long run impact is $\Theta, \Theta, \Theta_{21\ldots}$
It is depicted as -

$$\Delta Y\gamma = \alpha_1 + \vartheta Trend + \sum_{i=0}^{n} \gamma_1 \Delta L \gamma_{t1=I} + \sum_{i=0}^{n} \Psi_1 \Delta LN_E N_{t-1} + \sum_{i=0}^{n} W_1 \Delta LY\Delta_{1-i} + \sum_{i=0}^{n} W \Delta LY\Delta_{t-i} + \ldots + \ldots + \Theta_2 LYF_{t=1} + \delta N \in + \Delta\pi + \epsilon_t \quad ..(4)$$

Granger causality test

Where co-integration among the variables exists, we go the next step to apply the standard Granger causality test. In order to perform the test for Granger causality, we estimate the equations in the following form:

$$\Delta LPoR_t = \sum_{i=1}^{m-1} \beta \, \Delta LEnt_{t-1} + \sum_{i=1}^{m-1} \delta_j \Delta LPoR_{t-j} + \varepsilon_t \quad \ldots \quad (5)$$

$$\Delta LEntv = \sum_{i=1}^{m-1} \beta \Delta LPCI_{t-1} + \sum_{i=1}^{m-1} \lambda_j \Delta LEnt_{t-j} + \mu_1 \quad \ldots \quad (6)$$

where
$LPCI_t$ is the log of GDP per capita- dependent variable
$LEntv$ is the log of variables of entrepreneurship ie, PSD,PSSV etc ….
μ_1 is the white noise disturbance term,
ε is also the white noise disturbance term
For the Granger causality the decision rule is as follows. We refuse to reject the null hypothesis where the probability value equals to, or greater than 0.05. Then the reverse is the case when the probability is lesser than 0.05.

RESULT AND DISCUSSIONS

Table 1 Descriptive test Results

	PCI	INF	PSC	PSD	PSSV	UNE
Mean	1249.295	18.91439	32222.61	6792.612	1117.409	2859.735
Median	512.7000	13.00000	18345.00	366.9450	216.2600	13.99870
Maximum	3268.000	72.80000	127345.0	75432.00	5123.400	116162.0
Minimum	153.6000	5.400000	811.0000	4.880000	1.980000	6.975200
Std. Dev.	1136.727	15.89880	35847.14	18888.00	1599.322	18137.23
Skewness	0.589233	1.823761	1.375476	3.169396	1.315893	6.166422
Kurtosis	1.628745	5.593677	3.774500	11.22789	3.316039	39.02484
Jarque-Bera	5.584752	34.22062	13.95296	179.7974	12.00306	2476.893
Probability	0.061275	0.000000	0.000934	0.000000	0.002475	0.000000
Sum	51221.10	775.4900	1321127.	271704.5	45813.78	117249.1
Sum Sq. Dev.	51685918	10110.87	5.14E+10	1.39E+10	1.02E+08	1.32E+10
Observations	41	41	41	40	41	41

Source: Researchers Computation

Descriptive results were used to compare the statistical averages and standard deviations of the dependent and independent variables. This is expected to help establish the theoretical relationship that may exist between the variables. Table 1 shows the mean values, standard deviation etc of the parameters. The average (mean) is 1249 for the dependent variable- (poverty reduction); 18.91, 3222, 6792, 1117 and 2859, for the explanatory variables - inflation (INF), private sector consumption (PSC), private sector deposits (PSD), private sector savings (PSSv), unemployment rate (UNE), respectively. The variables dispersal from the mean (standard deviation) is between 1136 for the dependent variable, 15.8, 3584, 18888 1599 and 18137 also for the explanatory variables. The variables also exhibit an asymmetrical distribution with long tail to the right depicting high positive skew as above zero having values of 0.58 for the dependent variable and 1.8, 1.3, 3.16, 1.31 and 6.26, for the explanatory variables. The values of the kurtosis which quantifies whether the shape of the data of the distribution matches are 1.86 for the dependent variable. For the explanatory variables the values are 5.19, 2.28, ,1.64 , 2.61 respectively. The probabilities of the variables show significance at 5% level.
These results no doubt show interesting results since. This is so as most of the variables showed reasonable sign of relationship. While not neglecting the response of the fluctuating nature that the trends might have affected the normalcy of the variable distribution, there is further need for confirmatory tests. Therefore, we make theoretical case that such trends are likely to lead to causal relationship between the dependent and explanatory variables. Be it as it may, the claim is further subjected to further econometric tests for further confirmation or otherwise as depicted below.

Table 2 Unit Root test result

Variable	Intercept Only	Decision	Trend and Intersect	Decision
LPCI	-2.9237 (6.9759)*	I(0)	-3.5063 (-6.9773)*	I(0)
LInf	-2.9251 (-0.2758)	I(1)	-3.5085 (-1.7483)*	I(1)
LPSC	-2.9251 (1.92207)	I(1)	-3.5085 (-0.3104)*	I(1)
LPSD	-2.9500 (-1.5639)	I(1)	-3.5236 (-2.1451)	I(1)
LPSSV	-2.9389 (7.3517)	I(1)	-3. 5063 (2.0556)*	I(1)
LUNE	-2.9273 (-5.8167)	I(0)	-3.5063 (-6.1647)*	I(0)

Source: Researchers Computation

The ADF results depict that the series are not of the same order rather of different order of integration. That is to say the they are of mixed order. Some of the variables have different integrating order, hence while some are of I(1) , some are of I(0). Therefore the ARDL co integration test becomes more appropriate.

Table 3 Correlation test Results

	PCI	**INF**	**PSC**	**PSD**	**PSSV**	**UNE**
PCI	1					
INF	-0.3719	1				
PSC	0.8747	-0.2784	1			
PSD	0.5573	-0.1262	0.7703	1		
PSSV	0.8984	-0.2693	0.9897	0.7407		
UNE	-0.1369	0.1939	-0.1218	-0.0583	-0.1109	1

Source: Researchers computation

Table 3 depicts the correlation results. From the results, the private sector deposits and private sector savings show very strong positive relationship with poverty reduction of 87% and 89% respectively. As usual, the inflation and unemployment exhibit low negative correlation with poverty alleviation. The higher the private sector deposits and private sector savings, the more poverty is triggered. It implies that both negative influence on reducing poverty. The private sector deposits have positive and strong positive relationship with poverty reduction.

Table 4 The ARDL Results

Dependent Variable: PCI
Method: ARDL
Selected Model: ARDL(3, 1, 3, 0, 2, 0)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
PCI(-1)	1.088368	0.186972	5.821016	0.0000
PCI(-2)	-0.110295	0.352304	-0.313067	0.7572
PCI(-3)	0.351229	0.329555	1.065770	0.2981
INF	-1.706326	3.143023	-0.542893	0.5927
INF(-1)	2.617074	3.254890	0.804044	0.4300
PSC	-0.013005	0.014047	-0.925814	0.3646
PSC(-1)	-0.008892	0.016053	-0.553947	0.5852
PSC(-2)	-0.002887	0.022370	-0.129046	0.8985
PSC(-3)	0.055747	0.021628	2.577568	0.0172
PSD	-0.005636	0.005473	-1.029680	0.3143
PSSV	-0.910901	0.823241	-1.106482	0.2805
PSSV(-1)	-0.327284	0.795099	-0.411626	0.6846
PSSV(-2)	0.837423	0.663101	1.262889	0.2199
UNE	0.000642	0.002196	0.292352	0.7728
C	-222.7459	207.9451	-1.071176	0.2957

R-squared	0.977344	Mean dependent var	1272.122
Adjusted R-squared	0.962926	S.D. dependent var	1172.780
S.E. of regression	225.8146	Akaike info criterion	13.96824
Sum squared resid	1121829.	Schwarz criterion	14.62132
Log likelihood	-243.4125	Hannan-Quinn criter.	14.19848
F-statistic	67.78764	Durbin-Watson stat	2.193536
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

Source: Researchers' Computation

The R-squared value 0.97 and adjusted R squared of 0.96 shows that only 97 per of poverty reduction is accounted for by entrepreneurship. This confirms significance of the explanatory variable to drive the dependent variable. Yet this claim will further be tested subjecting it more confirmatory tests.

The coefficient of the explanatory variable- private sector consumption having a negative value of -0.013 has insignificant effect on poverty reduction having a probability of 0.36. This implies that the private sector consumption have a negative insignificance on stock prices. With regards to private sector deposits which have a coefficient value of -0.005 is insignificant having a probability of 0.3 greater than 5% level of significance. This depicts that private sector deposits has a negative insignificant effect on the reduction of poverty. Also with regards to private sector savings which have a coefficient value of -0.9 is insignificant having a probability of 0.2 greater than 5% level of significance. This depicts that private sector savings has a negative insignificant effect on the reduction of poverty. For unemployment rate, the coefficient of 0.0006 and probability of 0.7 show positive impact on reducing poverty although insignificantly. For inflation with coefficient of -1.7and a probability of 0.5 depicts negative insignificant relationship on stock prices.

Furthermore we test for the existence of a long run relationship between the dependent variable and the explanatory variables. This is done by using the Wald test that all the coefficients of the variations in levels are equal to zero. We draw a comparison between the estimated F-statistics with bounds and the F-critical or tabulated value. The 50%, 95%, 99% bounds critical F- value test bands for k=6 are (2.960-3.79), (3.12-4.25), (3.93-5.23) for model with both constant and trend. The calculated F-statistic is 67.7. This is greater than the bounds F- critical test. This indicates existence of a long-run relationship between the controlled variables and measured variables. The p-values of the explanatory variables are all greater than 0.05, which depicts that the explanatory variables significantly drive trade.

For the short run relationship, for there to be a long run relationship among the variables, the coefficients of the variables must be negative and also be significant at 5% level of significance. Using the one –lag period, the results depicts that all the lagged variables are insignificant at 5% level.
From the above, we conclude the existence of long run relationship between the explanatory variables and the dependent variable.

Table 5. Pairwise Granger Causality Result

Null Hypothesis	F- statistic	Probability	Decision	Type of causality
LINF≠> *LPCI*	0.0285	0.9719	Not Rejected	No Causality
LPCI≠ > *LINF*	1.5319	0.2307	Not Rejected	No Causality
LPSC ≠> *LPCI*	0.8758	0.4257	Not Rejected	Not Causality
LPCI≠> LPSC	4.5137	0.0183	Rejected	Causality
LPSD ≠> *LPCI*	0.7453	0.4839	Not Rejected	Not Causality
LPCI≠> *LFPSD*	1.9349	0.1615	Not Rejected	Not Causality
LPSSV ≠> LPCI	0.5396	0.5879	Not Rejected	No Causality
LPCI≠ > *LPSSV*	20.619	1E-062	Not Rejected	No Causality
LUNE ≠> *LPCI*	0.0170	0.9831	Not Rejected	Not Causality
LPCI≠> *LUNE*	0.3854	0.6831	Not Rejected	Not Causality

Source: Researchers Computation

We go further to perform the Pairwise Granger Causality test. It is a group and descriptive statistics. Table 5 depicts the results.
The probability of causality between inflation and per capita income is 0.97 and that of per capita income and inflation is 0.23. Both probabilities are greater than 0.05 and therefore suggest no causality. Therefore there is no causality between per capita income and inflation. In the same vein, the probability of causality between the private sector consumption and per capita income is 0.42. This is greater than 0.05 and depicts no causality The probability between per capita income and private sector consumption is 0.0136. This implies causality. Therefore there is a unidirectional causality between private sector consumption and per capita income running from CPI to private consumption. The probability of causality between private sector deposits and per capita income is 0.48 and that per capita income to private sector deposits is 0.16. Both probabilities are greater than 0.05 and therefore suggest no causality.
The probability of causality between private sector savings and per capita income is 0.58 and that per capita income to private sector savings is1E-062. Both probabilities are greater than 0.05 and therefore suggest no causality. Therefore, there is no causal relation between private sector savings and poverty reduction. The probability of causality between unemployment rate and per capita income is 0.93 and that per capita income to unemployment rate is 0.68. Both probabilities are greater than 0.05 and therefore suggest no causality.

Discussion of Findings

Finding 1 the above, we conclude the existence of long run relationship between the explanatory variables and the dependent variable. This implies that the effect of the entrepreneurial activities and participation in reducing poverty will be in the long run. Therefore the benefits accruable from such impact will have positive long run effect. Finding 2 there is no causality between per capita income and inflation. Economic Theory asserts that high rising prices is inimical to income. Rising and soaring inflation reduces the real income of the citizens. It has an inverse and negative relationship with poverty reduction. This is so since inflation is synonymous with poverty. Therefore inflationary trends ought to be checked if poverty reduction is to be vigorously attained. Finding 3 there is a unidirectional causality between private sector consumption and per capita income running from PCI to private consumption. This finding is in tandem with Economic Theory. Income is determines consumption. In this case the available income is consumed because of high poverty level. Therefore for there to be increased consumption, reduced poverty is a sine qua non.,
Finding 4 There is no causality between private sector deposits and per capita income. Deposits by bank customers is triggered when there is reduced poverty, increased income, thereby income exceeding

consumption. This finding corroborates the Economic Theory that income equals consumption and savings. It is this savings that is deposited in the banks and that implies poverty reduction. Therefore in the absence of reduced poverty, whatever is produced is consumed leaving no savings nor deposits in the banks by customers. Finding 5 There is no causality between unemployment rate and per capita income. This further implicates government failure to provide employment to the citizenry. A highly unemployed population is detrimental to reduction of poverty. That part of the population contributes little or nothing to the growth of the economy. Unemployment cannot drive poverty reduction and this corroborates with the Economic Theory. In view of findings 2 and 5, the reason is not in dispute. In the first place, the controlled variables – inflation and unemployment rate , that depicts governments policies on entrepreneurship has not engendered private participation and self employment. The rate of inflation has been soaring high and remains inimical to the private sector participation in business. Also the unemployment rate is very high and therefore unleashes poverty to the citizens. This is inimical to entrepreneurship efforts in poverty alleviation. For findings 3 and 4, It is not difficult to deduce that these factors accounts for why the private sector savings, consumption and deposits has not affected poverty reduction.

From the foregoing, all the probability values for both variables are greater than 0.05 except that of PCI to private sector consumption. There is no causal relationship between the explanatory and dependent variables. The entrepreneurship participation has not driven poverty reduction.

Taking together there is no causal relationship between entrepreneurial development variables and poverty reduction in Nigeria within the reviewed period. In summary the findings negates the findings Oghojafor *et al.*, (2011), Ogundele *et al.*, (2012). The findings further negates the theoretical framework of the study that the entrepreneur is an engine growth of the economy and should drive poverty reduction.

However, the data from the study may have affected the findings as the CBN data may not have included the informal and rural based entrepreneurs that may have contributed to self employment generation.

In summary, there is no causality between entrepreneurship and poverty reduction in Nigeria within the reviewed period.

CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This study investigated the effect of entrepreneurship on poverty reduction in Nigeria from 1981 to 2022. The descriptive and econometric statistics were adopted for data analysis. Results depict a long run relationship between poverty reduction and entrepreneurship. In summary there is no causal relationship between entrepreneurship variables and poverty reduction in Nigeria within the reviewed period.

Policies put in place to stimulate entrepreneurship in the country are inimical to reducing poverty ravaging the country and therefore negated reduction in poverty level culminating to failure to drive poverty reduction. By extension poverty could have been further reduced if proper entrepreneurial policies have been implemented. It is thus extended to mean that the policies so far implemented fall short of poverty reduction solutions. This explains the continued poverty index on the citizens over the years in the country. We recommend that there is urgent need to review the existing entrepreneurship policies. This may be form of incentives, tax holidays, soft loans and credit to the small and medium scale enterprises and other private sector ventures. Government policies should be geared towards reducing poverty by way of providing infrastructures, improving on the ease of doing business and other relevant initiatives that are private sector friendly. The soaring inflationary trend, high and escalating unemployment rate, and other factor inimical to private enterprises participation should be monitored to restore confidence on the local entrepreneurs. This will no doubt enhance and engender more active participation of the private sector and further boost reduction of poverty and consequently attract high per capita income and prosperity in the economy.

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SUB THEME

NEW ECONOMY AND KNOWLEDGE MANAGEMENT IN EMERGING MARKETS

MANAGING FINANCIAL INCLUSION INDICES FOR REDUCING POVERTY AND INCOME INEQUALITY GAPS IN NIGERIAN ECONOMY

[1]Ihemeje, James C.,[2]Ezechi, Chukwu P., [1]Nwabeke Christiana C and [3]Uchegbu, B. U. and [1]Samson C. L

[1]Michael Okpara University of Agriculture, Umudike
[2]Gregory University, Uturu
[3]Alvan Ikoku Federal University of Education, Owerri

ABSTRACT

Poverty and income inequality remain a stubborn challenge in Africa despite the continent's rapid economic expansion in previous decades, which lifted millions out of poverty. Financial inclusion is often considered as a critical element that makes growth inclusive as access to finance can enable economic agents to make longer-term consumption and investment decisions, participate in productive activities, and cope with unexpected short-term shocks. Understanding the link between financial inclusion, poverty, and income inequality at the country level will help policymakers design and implement programs that will broaden access to financial services, leading to reduction of poverty incidence and income equality. The study analyzed the effect of financial inclusion on poverty alleviation in Nigeria using time series data spanning from 1992 to 2018. Financial inclusion was measured by number of variables: mobile money operations and electronic money transfers, commercial banks branches, commercial banks credit to rural populace, deposits of customers in the banking sector, microfinance bank branches, microfinance banks credits and microfinance banks deposits while poverty alleviation was measured by per-capita income. The data analysis was carried with the technique of autoregressive distributed lag (ARDL) since the test for stationarity revealed that the variables under consideration were of mixed integration. The ARDL bounds test revealed that financial inclusion and poverty alleviation cointegrated, that is, a long-run relationship existed among the variables under consideration. In the long-run, deposits of customers in the banking sector and microfinance bank branches were the most significant financial inclusion measures. However, the long-run coefficients showed that mobile money operations and electronic money transfers, commercial banks credit to rural populace, microfinance banks credits and microfinance banks deposits had positive effect on per capita income while commercial banks branches, deposits of customers in the banking sector and microfinance bank branches had negative effect on per capita income. In the short-run, commercial banks branches and microfinance bank branches had negative effect on per capita income while all other variables had a negative effect. On the other hand, all the explanatory variables were significant except commercial banks credit to rural populace, deposits of rural commercial banks and microfinance banks deposits. Based on these findings, the study concluded that financial inclusion was majorly transmitted through commercial banks and microfinance towards poverty alleviation Our findings suggest that the provisions for young and old-age populations, e.g., retirement pensions; and stronger rule of law, including enforcement of financial contracts and financial regulatory oversight, will broaden financial inclusion, thereby contributing to poverty reduction and lower income inequality. Hence, policies aimed at driving Poverty and inequality reduction were recommended.

Keywords: Financial inclusion, poverty alleviation, mobile money operation, electronic money transfer, commercial bank credit.

INTRODUCTION

One of the problems confronting the world is the rising case of Poverty in many nations, as many people are not earning up to $1.25 daily ((WHO/UN 2000). The principal objectives of The United Nations Millennium Development Goals (eight 8- goals) signed in September 2000 by 191 UN Member Nations was "to Eradicate Extreme Poverty and hunger by the year 2015" (WHO/UN 2000). According to Kazeem, (2018), Nigeria has become the "Poverty Capital of the World' as more than 50% of her estimated population of over 180 million people are now living in Extreme Poverty" (World Poverty Clock, 2018). The state of poverty in the world is often linked to inability to access information about financial services because it is either that many people lack knowledge of the financial products and services or the services have not been offered or provided to them or that the services are provided at a cost they cannot afford. They are therefore, excluded. UThorat (2007), posits that the authorities of different member countries under the Alliance for Financial Inclusion have shown greater interest, indicating their

concerns that a great number of the world's population are still not included in the formal payments system while the Financial Markets are developing rapidly globally. In view of the seeming market failure, Financial Sector Regulators globally are seeking to create enabling conditions towards making the markets to become more open, create more competition, offer affordable products and services and thereby bring inclusiveness. According to the Alliance for Financial Inclusion, (Maya Declaration 30th September, 2011), an estimated number of 2.3 billion people are excluded from formal financial services all over the world. Nwankwo (2014), states that Financial Inclusion is the provision of a broad range of high quality financial products and services, such as Savings, Credit, Insurance, Payments and Pensions, which are relevant, appropriate and affordable for the entire adult population, especially the low income segments of the economy, and has the capacity of turning around the economic fortunes of rural poor (EFInA) (2013).

The concept of Financial Inclusion first evolved with the initialization of Co-operative Movement in India during 1904, (Kazeem, 2018). In Nigerian, the concept of Financial Inclusion could be traced back to 1976 with the constitution of a 14-Member Committee under the Chairmanship of a distinguished Economist, Dr. Pius Okigbo, to examine the adequacy, relevance or otherwise of the structure of the Nigerian Financial System to meet the needs of the economy for rapid development (Okigbo, 1976). The findings of the Committee which, among other things, stressed on Poverty and low level of Economic Growth as a direct result of many people not being included in the financial process, gave rise to a number of Economic Policies and Reforms. These included the expansion of Commercial Bank Branches (Rural Banking), Peoples' Bank of Nigeria as well as many Poverty Alleviation Programmes (Okoye *et al.* 2017).

The motivation for Financial Inclusion is designed at ensuring that all adult members of the society have access to financial products and services, designed towards their specific needs and provided at reasonable costs. Such products include Payments, Savings, Credit, Insurance and Pensions. According to Central Bank of Nigeria (2012) report, Financial Inclusion is a process that assures the ease of access, availability and usage of the formal financial system by all members of an economy. A key metric for measuring Financial Inclusion is the ratio of banks to total population. Soludo (2011), opines that the ratio of banks to total population was 24,224 persons in 2010, indicating a high level of exclusion. This position confirms the observation of Enhancing Financial Innovation and Access (EFInA) 2010 survey which showed that 46.3% of Nigerians are still financially excluded. Salathia (2014), states that financial access is an imperative policy tool engaged by the government towards stimulating growth based on its aptitude to facilitate efficient allocation of productive resources which will in turn reduce the cost of capital. This process can meaningfully improve the day-to-day management of finances, as well as diminish the growth of informal sources of credit (such as money lenders), which are often found to be costly.

The seeming importance of an inclusive financial system is determined by the important role of finance as one of the serious features for growth and development in any economy. This acknowledgement, together with the fact that growth alone cannot be feasible without finance, has encouraged an interest in Financial Inclusion among the Academic world, Public Policy makers, and Regulators.

A comprehensive financial system enables effective distribution of useful funds and this can possibly lessen the cost of capital. Financial Inclusion offers an opportunity for placing the savings of the poor into the official financial intermediary system and station them into investment portfolios. Furthermore, the huge amounts of little deposits give Commercial Banks prospects to decrease their reliance on unpackaged deposits and aid the Commercial Banks to improve and succeed both in liquidity risks and asset and liability disparities (Okoye *et al.,* 2017).

Financial Inclusion can lead to lowering the progress of unceremonious channels of credit such as money lenders which are time and again seen to be costly (Sarma, 2008). Financial Inclusion safeguards the deprived from the controls of informal money lenders. Persons left out from formal financial system often depend on the informal sector to assist them with finance and are frequently charged excessively high rates. It is as a result of this that the financially excluded individuals do not have access to more credit options. Therefore, a cruel cycle of high cost of finance is customary where an individual borrows at high costs and pays out a considerable share of his/her income to money lenders. Thus, since the issue of poverty has become a major problem across nations, especially the third World countries (African countries inclusive), Financial Inclusion has become very imperative (Okoye *et al*. 2017).

Consequently, the Nigerian Government has pushed for increased Financial Inclusion in the National Development Agenda through an ambitious target of universal financial access by 2020 and various initiatives such as Agent Banking, Consumer Protection, Financial Literacy, implementation of the Micro Small and Medium Enterprises (MSME) Development Fund, Tiered Know-Your-Customer (KYC) requirements, linkage banking, and credit enhancement programmes (that is, Agricultural Credit Guarantee Scheme Fund (ACGSF), Commercial Agricultural Credit Scheme (CACS), Entrepreneurship

Development Centres, Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL), Refinancing and Rediscounting Facilities for SMEs and Small and Medium Enterprise Credit Guarantee Scheme are being targeted. Considering the possible "cost in foregone economic growth when the volume of financial services in a country does not reach a sufficiently large share of the population" (Barajas, Chami & Yousefi, 2013 as cited in Naceur, Barajas & Massara, 2015), these measures may be necessary to encourage increased financial coverage in the country.

Several measures have been taken by banks in most of the developing countries to improve access to affordable financial services through financial education, leveraging technology, launching of various schemes and generating awareness. Despite this, access to formal banking system by weaker sections of society in most of the developing countries is affected by several barriers. The lack of awareness, low income and assets, social exclusion, illiteracy are the barriers from the demand side (CBN, 2012). The distance from bank branch, branch timings, cumbersome banking procedure and requirements of documents for opening bank accounts, unsuitable banking products or schemes, language, high transaction costs and attitudes of bank officials are the barriers from the supply side. Hence, there is a need for Financial Inclusion to build uniform economic development in order to usher in greater economic and social equity (CBN, 2015). Access to formal financial services require documents of proof regarding person's identity (KYC), postal address and proof of income. Other factors include poor staff attitude, unsuitable products, difficulty in understanding the language, documentations, and distance to bank branches, poor technology coverage / infrastructure and knowledge of financial products.

CONCEPTUAL REVIEW

Table1: Comparative indices on Financial Inclusion and Poverty Alleviation-Nigeria and India (2000-2018)

S/N	Details	Nigeria	India	Remarks
1	Regulatory Arrangement	Coordination and regulation are weak. There are no rigid sanctions by CBN on defaulting banks	Appropriate sanctions are in place and being implemented by the Reserve Bank of India	Rule of law/ appropriate regulatory framework play vital roles in implementing Financial Inclusion Strategies
2	Population Growth	Grown by about 60.10%	Grown by about 31.39%	High population growth is a major impediment to Poverty Alleviation
3	Technology Growth	Although commendable, but there is room for improvement	India has achieved a high level of Technological growth.	Technology growth is a key factor in Financial Inclusion

Source: Authors Compilation, 2023

Poverty has been a source of great worry to the word over a long time. In order to deal with the issue and make a world a better place, the United Nations developed the Millennium Development Goals in the year 2000 (UN/World Bank 2000). There are eight (8) goals with the primary objective of Eradicating Extreme Poverty and Hunger by the year 2015. Although the number of people living in Extreme Poverty dropped by more than half between 1990 and 2015, many are still struggling to meet the benchmark of US$ 1.25 a day. Sub-Saharan Africa has remained the worst hit, with seven of the ten poorest nations coming from the Continent. Nigeria is now regarded as the "the Poverty Capital of the World" (Kazeem,

2018). The programme (Millennium Development Goals) was changed to the Sustainable Development Goals- SDG, which objective is to achieve the above stated targets by the year 2030.

Theoretical Review

Finances are crucial elements in the development of any Economy as no economy can witness appreciable growth without a good Financial System. The relationship between finance and real activities can be traced to Smith (1776), who argues that real growth in an economy is driven by activities of the Financial System because increased production and specialization are facilitated by enhanced resource (credit) acquisition offered by the system. Also, Bagehot (1873), posits that the 19th century Industrial Revolution in Europe was propelled by the Financial System which mobilized funds in unusually 'big form' for industry. Corroborating the views of Smith (1776), and Bagehot (1873), Schumpeter (1912), avers that technological innovation (a requirement for productivity and growth) is facilitated by the financial sector through efficient resource mobilization and allocation. Schumpeter maintains that a developed and functional financial system is a condition precedent to a successful entrepreneurial engagement in technological innovation because translating innovative thinking (ingenuity) into real output has cost implications which may not be covered by entrepreneurs themselves. He argues that an efficient financial system is able to identify and fund entrepreneurs who have the greatest chances of successfully transforming innovative ideas into marketable products through innovative production processes.

Theories of Financial Structure and Development: The thesis fits in well with a large amount of literature on the theory of financial development. However, the broad nature of the concept of financial development, which encompasses financial structure, inclusion and deepening, makes it imperative to confine the study within the purview of financial inclusion theory. Their inter-relatedness, however, compels the author to review the whole concept of financial development theoretically. Many theories have been formulated on financial structure, though the author focuses on three that tie in well with this study.

Financial Deepening, Inclusion and Development Nexus: According to Hannig and Jansen (2010), the failure of a traditional measure of financial development using, for example, 'private credit to GDP' that captures only 'depth' to the neglect of 'breadth,' calls for a shift in the existing paradigm. Breadth that encapsulates access to financial resources/services defines an inclusive financial system. This is often neglected in the traditional measure that emphasises the policy end of accumulation of capital at the aggregate level. There is a lack of consensus among policymakers and researchers on the linkages that must exist between financial deepening, inclusion and development. For instance, Beck et al. (2015) argue that financial development is a necessary, but not sufficient, condition for inclusion. Deliberate policy actions are therefore required to ensure inclusion emerges from financial development. Also, as the linkage between financial deepening and access becomes weaker, financial development tends to be suboptimal. Klapper and Singer (2011), also find a positive, albeit imperfect, correlation between Financial Inclusion and financial development.

It is clear in the literature that an active financial system is an essential condition for long term economic growth. Schumpeter (1911), debated that financial inter-mediation contributes a major part in economic growth thereby ensuring productivity, technical change and an active financial sector and the distribution of savings through two channels. Firstly, these policies make credit cheaper, boosts entrepreneurial activities, generate employment opportunities and enhance the welfare of the poor. Secondly, the availability of cheaper credits can also provide a connection to the financially weaker area by allowing them to invest and advance the life of their children as well as enhance the human capital of the economy which improves the income distribution channel. Goldsmith (1969), and McKinnon (1973), absolutely agree in their suggestions that finance can promote growth by inspiring technological advancement. Goldsmith (1969), and Greenwood and Jovanovich (1990), reiterate that, the level of adequacy attained by financial institutions in accepting and meting out advice about investments at the bargain cost, permits credit to be focused on the best capable entrepreneurs/firms, that will present new enhanced products and production processes. The arguments put forward were taken to appraise how well household income administration impacts advance in limiting poverty. By invoking the Gini index, the results specify that higher inequality tends to crave a lower rate of poverty abridgement at an absolute rate of growth. The researcher also evaluated Sarma's theory of index of financial inclusion as well as the theory of credit creation and sums up that equality in income distribution and credit availability affect how abundant the poor can get to improve average incomes and financial well-being.

Sarma's theory of Index of Financial Inclusion: Yaaba (2017), states that Financial Inclusion operates on three interrelated indices or dimensions. These are: penetration, services offering and usage. This was postulated by Sarma (2008), as a critical criterion for measuring inclusiveness.

According to Sarma (2008), Penetration Index measures the number of Bank Accounts that the adult population operate in a given economy. This dimension looks at the availability of banking services to the people in the system. In the Service Dimension, Sarma (2008), measures the number of bank branches and service outlets like ATM etc at the disposal of the populace. Access to financial services is a core factor of Financial Inclusion. In the Usage Dimension or Index, Sarma (2008), postulates that Financial Inclusion is effective when the citizens have access to credits and are also willing to use the products and services offered to them by the lending institutions. This is a most crucial Dimension as it is not only the availability and access that matter, but the usage of the services offered.
Financial Inclusion is not only about product and service availability, but about the usage of such services and products. This platform also confirms to the standard that there are available products and services, which are suitable and have been offered at affordable prices.
Moreover, Sarma, (2008 & 2012), designed mathematical equations and certain formulae/ assumptions to determine whether a country is financially included or not. In the range between 0 and 1, the theory states that a country is assumed to be included when the range swings towards 1 than 0. At point 1, a country is said to be perfectly included, while point 0 indicates absolute exclusion.
In summary, Yaaba (2017), states that Nigeria has measured well on the general assessment, rising from 0.425 to 0.505 between 2007 and 2015. The Penetration Index fared better, recording a peak of 0.340 in 2013 and 0.322 in 2016. This implies that efforts at penetrating the unbanked are yielding higher results. Fie also stated that Service and Usage Indexes have not measured up to the expected milestone. This implies that although more people are having access to financial services, only a significant proportion are using them, thereby constituting a problem in achieving the inclusion milestone of 80% of the adult population by the year 2020. He opines that it is only when the services are used that Poverty can be said to be reducing.
Theory of Credit Creation: According to Starkey (2018), Money within the economy can be in the form of whilst the remaining higher volume of the money in circulation comprises of credit money which have been created by the Banking System (Commercial, Microfinance, Mortgage Banks etc) (Ryan-Collins *et al.,* 2011). The role of the Banking sector in any economic system is very crucial, as it acts, not only as agents of intermediation, but a process of expanding the money stock in the system. According to Syll, (2014), this is achieved when Banks grant Credits to their customers. He stated further that it has been proved empirically that individual banks create credits and money when they extend bank loans to their customers, who in turn transfer such amount to their accounts in order banks or by issuing cheques to their customers who operate accounts with other banks. The money now moved to another bank also affords that bank the opportunity of having money at their disposal for further lending.
The theory was initiated by Schumpeter (1912), who stated that the first known advocate of Credit Creation was Plato. He posits that banks play central roles as creators and allocators of the money supply, thereby expanding the volume of money in circulation. It is the ability of banks to raise funds for loans and other credits that enable the poor in the economic system to have access to funds for development of their business. This in turn assists in Poverty Reduction.
According to Werner, (2014), Banks are crucial elements in the Financial Intermediation process, collecting deposit from customers and lending part of it to those who need it, in line with the Monetary Policy of the affected economy. The process of Money Creation is also regarded as the 'Money Multiplier Process', which has the capacity of enabling users of financial services to obtain credits for business expansion, Poverty Reduction and Economic Development.
GINI Index/ Coefficient: Theory of Income Distribution: One of the Macro Economic goals of any nation is to ensure equality in the Income Distribution process. Income Inequality is a major problem that affects the Poverty level of any nation and it is a peculiar issue in determining Poverty Index (Ajibola 2017). It is also a major concern of a government when there is a wide gap between the rich and the poor.GINI Index, Coefficient or Ratio is a statistical dispersion that represents the Income or Wealth distribution of a population (Agarwal 2019). Designed by Corrado Gini in 1912, the concept measures the inequality among values of a frequency distribution between 0 and 1 or between 0% and 100% of a given population. Unlike the Sarma theory, the closer the index is to zero (0), the more equality is recorded in the economy, while the more the index moves to 1, the worse the scenario. Income Inequality is measured by the GINI Coefficient, using the Lorenz Curve. The Curve indicates that 0 is Equality (Perfect Equality) while 1 is Inequality (Perfect Inequality).
The figures for the computation of the Indices are collated by the World Bank Development Research Group for Data Computation. The World Bank, (2013), indicates that Nigeria recorded a level of 48.8% on the Income Inequality Index (UNDP- World Human Development Report (2013). Further reports

indicate that the country recorded an all-high figure in 1996 (51.90%) and the lowest of 38.70% in 1995.
Income levels, within an economy are categorised as follows: Lower Class, designated as Decile 0-03 (those who earn about 5% of the income in the population), Middle Class, designated as Decile 04-07 and Upper Class, designated as Decile 08-10.
The Lower Class are those within the lowest 10% of the population, the Upper Class represents the 10% of the people with the highest (topmost) level. According to the 2018 Report of the National Bureau of Statistics (2018), Nigeria recorded the following figures for the different categories in 2016.
The effect of financial inclusion on poverty reduction is highly beneficial, but for rural dwellers to benefit, cost of participating in financial openness should be reduced, the policy package must take into account the risk of interest charged by banks and financial exposure or openness of rural communities in Nigeria. This is because the levels of Financial Literacy are often low in rural areas. This makes it difficult for people to understand the financial dynamism and services/ products they have around them which may be exploited for their benefits.

METHODOLOGY

The study adopted the model of Onaolapo (2015) but with some modifications. Onaolapo (2015) model
PCI_t=/(MMO, CBB, CBRD, CBDR, MCBB, MCBC, MCBD)... ***eqn.***3.3
$PCI_t = Po + piMMOt + p_2CBB_t + p_3CBCR_t + p_4CBDR_t + p_5MCBB_t + p_6MCBC_t + p_7MCBD_t + U_t$ ***eqn.*** 3.4

Where; PCI = Per capita income
MMO = Mobile Money Operations and Electronic Money Transfers CBB = Commercial bank branches,
CBCR = Commercial Bank credit to rural populace
CBDR = Commercial Bank Deposit of Customers in the rural areas
MCBB = Microfinance bank branches
MCBC = Microfinance bank credits
MCBD = Microfinance bank deposits
Po = Intercept
Pi - p_7= Parameters
U_t = stochastic term

Po, Pi, P2,P3,P<i,P5,P6,P7 are parameters of the model a priori expectation are that **po, Pi, P2,P3,P4, Ps,P6,P7>**The long-run estimates of the ARDL model
The long-run estimates presented in Table 4.5 showed that mobile money operations and electronic transfers (MMO) had a positive effect on poverty alleviation (measured by PCI) such that a 10% increase in MMO caused PCI to increase by 0.24%. It was also found that a 10% increase in number of commercial banks' branches resulted to approximately 1.05% decrease in PCI. Also, a 10% increase in commercial banks' credit to rural populace (CBCR) caused an increase of about 8.62% in PCI, while increase in deposits of rural populace (CBDR) caused a diminishing effect of 0.67% on PCI in the long-run. Against ***a priori*** expectation, 10% increase in number of microfinance banks' branches (MCBB) caused PCI to reduce by 15.09% in the long-run. It was also revealed, that 10% increase in microfinance bank credits (MCBC) caused PCI to accelerate by 0.97% in the long-run. Again, a 10% increase in microfinance banks' deposits (MCBD) resulted to approximately 1.86% increase in PCI in the long-run.

RESULTS AND DISCUSSIONS

The short-run estimates are also of relevance in the estimation of the financial inclusion-poverty

Table 2: Long-run estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(MMO)	0.024198	0.037216	0.650205	0.5278
LOG(CBB)	-0.105610	0.466686	-0.226298	0.8248
LOG(CBCR)	0.086239	0.055730	1.547447	0.1477
LOG(CBDR)	-0.067352	0.020716	-3.251274	0.0069
LOG(MCBB)	-1.509679	0.643699	-2.345318	0.0370
LOG(MCBC)	0.097041	0.417364	0.232510	0.8201
LOG(MCBD)	0.186497	0.488378	0.381869	0.7092
C	14.82195	6.719394	2.205846	0.0476

Source: Author's computations using E Views 10.0

relationship. Table 2 below presented the dynamic short-run estimates of the ARDL model. The sort-run estimated coefficients revealed that coefficients of MMO, CBB, CBCR and MCBC are very much in consonance with the long-run estimates. However, the proportion by which MMO, CBB and MCBC contributes to PCI is comparatively higher in the short-run than in the long-run. In the short-run, MMO, CBCR, CBDR, MCBC and MCBD accounted for positive changes in PC whileCBB and MCBB accounted for negative changes in PCI. Specifically, the short-run coefficients of the explanatory variables revealed that 10% increase in MMO, CBCR, CBDR, MCBC and MCBD caused about 1.73%, 0.30%, 0.58%, 3.83% and 0.82% increase in PCI respectively. On the other hand, 10% increase in CBB and MCBB caused approximately 1.14% and 3.03% decrease in PCI respectively.

Table 3: Short-run estimates

Variable	Coefficient	Std. Erro	t-Statistic	Prob.
DLOG(MMO)	0.173676	0.035703	4.864456	0.0005
DLOG(CBB)	-0.114077	0.035399	-3.222605	0.0081
DLOG(CBCR)	0.030924	0.035869	0.862153	0.4070
DLOG(CBDR)	0.058011	0.056399	1.028578	0.3258
DLOG(MCBB)	-0.303374	0.080515	-3.767900	0.0031
DLOG(MCBC)	0.383592	0.058076	6.604985	0.0000
DLOG(MCBD)	0.082582	0.153419	0.538279	0.6011
ECM(-l)	0.476604	0.048741	-9.778271	0.0000
R-squared	0.801803	Mean dependent var		0.067289
Adjusted R-squared	0.791894	S.D. dependent var		0.136990
S.E. of regression	0.062493	Akaike info criterion		-2.621015
Sum squared resid	0.078108	Schwarz criterion		-2.521829
Log likelihood	30.83116	Hannan-Quinn criter.		-2.597649
Durbin-Watson stat	2.480841			

Source: Author's computations using E Views 10.0

The error correction mechanism (ECM) tells the degree to which the equilibrium behaviour drives the short-run dynamics. Thus, the ECM term is of importance in cointegration analysis. The coefficient of the ECM term which signifies the speed of adjustment of the model to equilibrium in the event of shocks, shows that 47.66% of disequilibrium errors were corrected. The ECM term is also found to be negative and significant; further confirming the existence of a long-run relationship between financial inclusion and poverty alleviation in Nigeria. The value associated with the Adjusted R-squared is 0.791894, indicating that the explanatory variables accounted for approximately

79.18% of the total variations in PCI.
The test of hypotheses was based on the following decision rule: Accept null hypothesis if "probability value is greater than 0.05." Reject null hypothesis if "probability value is less than 0.05."
Hoi: Mobile money operations and electronic money transfers have no significant effects on per capita income in Nigeria.
The long-run p-value of mobile money operations and electronic money transfers (MMO) is 5278 > 0.05, while its short-run p-value is 0.0005 < 0.05. This implies that MMO was insignificant in affecting PCI in the long-run, while it was significant in the short-run. Hence, it was concluded that MMO has a significant effect on PCI in the short-run and insignificant in the long-run.
H**02**: Commercial bank branches have no significant effect on per capita income in Nigeria.
In the long-run, the p-value associated with number of commercial banks branches (CBB) is 0. 8248 > 0.05 whereas the short-run p-value of CBB is 0.0081 < 0.05. It then implies that CBB has an insignificant effect on PCI in the long-run, while the effect of CBB was observed to be significant in the short-run.
H**03**: Commercial bank credits to rural populace have no significant effect on per capita income in Nigeria.
With p-values of 0.1477 and 0.4070, it was established that commercial banks credit (CBCR) to the rural populace has no significant effect on PCI both in the long-run and short-run. Hence, the null hypothesis was accepted.
H**04**: Deposits of rural branches of commercial banks have no significant effect on per capita income in Nigeria.
Based on the long-run and short-run p-values of 0.0069 and 0.3258 respectively, it was found that deposits of rural branches of commercial banks' (CBDR) had a significant effect on PCI in the long-run, but exert an insignificant effect in the short-run.
H**05**: Microfinance bank branches have no significant effect on per capita income in Nigeria.
This hypothesis tested significance in the long-run and sort-run following the p-values (0.0370 < 0. 05; 0.0031 < 0.05). Hence, it was concluded that number of microfinance bank branches has a significant effect on PCI.
Ho6: Microfinance bank credits have no significant effect on per capita income in Nigeria.
The long-run p-value (0.8201) associated with the coefficient of microfinance bank credits (MCBC) revealed that MCBC has no significant effect on PCI in the long-run. On the other hand, with a p-value of 0.0000, it was established that MCBC has a significant effect on PCI in the short- run.
H07: Microfinance bank deposits have no significant effect on per capita income in Nigeria.
With p-values of 0.7092 and 0.6011, it was observed that microfinance banks' deposits (MBCD) has no significant effect on both the long-run and short-run respectively. This observation led to the rejection of the null hypothesis at 5% level.
The study found that mobile money operations and electronic money transfers (MMO) had a positive effect on PCI in the long-run and short-run, however, MMO was significant in the short- run. This implies that MMO was more influential in the short-run than in the long-run. On the other hand, the positive coefficient of MMO indicated that PCI was rising due to increase in money operations and electronic money transfers. This explains how mobile money potentially helps reduce poverty by ameliorating PCI, several areas of market failure in developing economies, including savings, insurance, etc. This finding is in consonance with Ageme et al. (2018), who concluded that mobile money operations and electronic money transfers have transformed the landscape of financial inclusion in developing and emerging market Economies, leapfrogging the provision of formal banking services.
Though, it is expected that increase in number of commercial bank branches (CBB) would help extend banking services to the unbanked but the coefficient of CBB was found to be negative in the short and long-run, but significant in the short-run. This implies that amidst increase in CBB, PCI was reducing. A plausible reason for this scenario could be due to the fact that commercial banks, even when located in rural areas, mobilize savings but fail to extend credit to small scale business people due to fear of default. This implies that the rural populace is yet to fully benefit from bank branches closer to them.
Also, it was found that commercial banks' credit to rural populace (CBCR) had positive effect on PCI in both the long and short-run, but failed to make a significant impact. Truly, the positive effect of CBCR was justified on the grounds that it provides a source of funding for productive ventures among the rural populace. On the other hand, the insignificance of CBCR could be attributed to the fact that commercial banks have not extended credit sufficient enough to drive rural productivity. In support of this finding, Ajibe (2015), attributed low credit extension to rural populace to high lending rate of commercial banks in Nigeria. Also, Onaolapo (2015), attributed low credit to rural populace to vagaries associated with

farming activities of which most rural dwellers are engaged in. Based on this premise, low credit could spur poverty as PCI would be increasing at a very slow pace, thus reflecting low productivity per head.

Again, deposit mobilization in the rural areas (CBDR) had negative and significant effects on PCI in the long-run, but had a positive and insignificant effects in the short-run. This implies that deposit mobilization by commercial banks does not have immediate effect on PCI, but over a long period, it begins to exert negative effect on PCI as such funds with the banks are usually channeled to rich customers other than the rural dwellers that made the deposits. Hence, this could lead to loss of investments as PCI drops in the long-run. Studies such as, Nkwede (2015); Onaolapo (2015), state that accumulation of deposits from rural dwellers without credit extension to them could cause negative effect to PCI in the long-run, hence increase in poverty.

Looking at the effect of number of microfinance banks' branches (MCBB) was significant to PCI, but caused diminishing effect on PCI. This could be as a result of inability of the microfinance banks to effectively penetrate into the economy. For instance, the microfinance banks are being dominated by the commercial banks and they lack the level of patronage they desire to make a positive impact on the economy. However, microfinance banks credit had positive and significant effect on PCI in the short-run indicating that microfinance banks could drive productive activities. The findings were in tandem with prior empirical studies such as Migap (2015); Quanda (2018), who asserted that microfinance banks facilitate financial inclusion and poverty reduction.

CONCLUSION AND RECOMMENDATIONS

The study empirically investigated the effect of financial inclusion on poverty alleviation in Nigeria using data from 1992 to 2018. Findings from the ARDL analysis revealed that: mobile money operations and electronic money transfers had positive effect on PCI in Nigeria, but it was significant in the short-run. although number of commercial banks' branches had negative effect on PCI in the long-run and short-run, it was found to exert significant effect on PCI in the short-run. in both the long-run and short-run, commercial banks' credit did not exert significant effect on PCI, though the coefficient was positive. deposit of rural populace had negative and significant long-run effect on PCI, but turned positive and insignificant in the short-run. number of microfinance banks' branches caused a diminishing and significant effect on PCI in the long-run and short-run. microfinance banks' credit had a significant positive effect on PCI in the short-run, but had a positive and insignificant long-run effect on PCI. deposit mobilized by microfinance banks has no significant effect on PCI in the long-run and short-run respectively. This thesis set out to study the effect of financial inclusion on poverty alleviation in Nigeria. Econometric models were developed with the aid of empirical and the theoretical literature on the relationship between financial inclusion and poverty alleviation. Empirical results showed that measures of financial inclusion explained large proportion (79%) of the total variations in PCI.

Specifically, in the long-run, deposits of rural commercial banks and number of microfinance banks branches were the most significant financial inclusion proxies. On the other hand, in the short-run, mobile money operations and electronic transfers, number of commercial banks branches, microfinance banks branches and microfinance banks credits were the most significant factors that affected PCI. These findings showed that financial inclusion affects PCI through different channels at different periods through commercial banks and microfinance banks. Hence, it was concluded that financial inclusion is transmitted through the commercial and microfinance banks in Nigeria.

Having analyzed the effect of financial inclusion on poverty alleviation in Nigeria, the following recommendations were made: With the progress towards a cashless society through electronic money transfers and mobile operations in Nigeria, the Central Bank of Nigeria should ensure the safety, efficiency and effectiveness of the domestic banking system. Such a transformation policy needs gradual implementation preceded by aggressive public enlightenment. Specifically, more media platforms and different languages with local means of communication should be deployed to enhance the use of electronic money transfers and mobile operations across the country. Commercial banks should thrive and establish more branches across the country so as to take financial services closer to the people, especially those in the rural areas. This will enable funds mobilization as well as to give financial advice and assistance to business owners located in the interior parts, hence growth in business activities and poverty reduction. Commercial bank credits to the rural areas has a positive effect on poverty alleviation in Nigeria, hence, the Federal Government through the Central Bank of Nigeria (CBN), should strengthen the Banking Sector to ensure improvement in credit flow to the activity sectors because of its strategic importance in reducing poverty. Also, savings behavior of the various agents (household, corporate, non-corporate, and government) should be rigorously analyzed and their findings should be used in policy

formulations and decisions towards poverty alleviation. More branches of microfinance banks with functional and adequate number of automated teller machines (ATM) to be located in both urban and rural areas. The newly established NIRSAL National Microfinance Bank should be encouraged to open at least two (2) branches in every state of Nigeria. This will create employments for the citizens, encourage accessibility to financial services at affordable cost and become an agent for poverty alleviation purposes. It is also recommended that the Monetary Authorities and Regulatory Institutions should play effective role in ensuring that cost of micro-funds is affordable, and that microfinance banks amass deposit but extend adequate microcredit to the target population. Government should improve the level of infrastructure (roads, electricity etc) in the country to enable Financial Institutions to comfortably penetrate rural areas and mobilize deposits for investments towards alleviation of poverty in the country. The Tiered Know Your Customer system is not effectively adhered to due to poor Identity
Card Management process. The Government should design an effective identity card system, like in India, to curb the surge in fraudulent activities in the country. That will enable the commercial and microfinance banks to expand their credit portfolios. Enforcement of birth-control is a fundamental element in checking population growth. In comparison with India, Nigeria's population does not have a restriction and the growth rate does not also seem to match Government Intervention Strategies. Effective birth control measures to be put in place. The Federal Government, through the Federal Ministry of Finance and the Central Bank of Nigeria, should mandate States to operate their own banks, with at least 3 branches in each of the 360 Federal Constituencies in Nigeria. This will create not less than 1080 additional bank branches nationwide. It will not only reduce the high Bank/ Population density but will create more employment and also expose more citizens to banking products and services.

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EXPLORING THE ROLE OF VALUE ORIENTATION IN SMALL AND MEDIUM-SIZED ENTERPRISE (SME) AND ENTREPRENEURIAL DEVELOPMENT IN NIGERIA

[1]Ngozi Okechukwu and [2]Agbai, Edward P.
[1]Michael Okpara University of Agriculture, Umudike, Nigeria
[2]Emmanuel University, Raleigh, NC, USA
Corresponding author: ugochin56@yahoo.com

ABSTRACT
In this study, the authors examined knowledge gaps among Small and Medium-Sized Enterprise (SME) owners and Managers regarding core business value strategies and practices and the implications for long-term business sustainability in Nigeria. A qualitative Methodology and multiple case study design was used to obtain and interpret the descriptive data needed to answer the research questions that explore core business value strategies and practices required for long-term enterprise performance, growth, and sustainability in SME businesses.In line with the exploratory process data, interviews with six SME owners and managers within information technology, hospitality, and transportation services using open-ended questions. The study's credibility was achieved by triangulation of interview responses, document reviews, and observations. The four dominant emerging themes were business integrity, building business, and individual Resilience, taking the Initiative, and needing attitudinal and mindset change through value re-orientation. The study concluded that Schwartz's Theory of Basic Human Values has widespread applications in business and cross-cultural studies and is instrumental in comprehending consumer behavior, organizational culture, decision-making, and social interactions in SME businesses. The recommendations for the study include continuous and widespread values re-orientation on the emerging themes to enshrine the core values into the mindset of SME owners, employees, and stakeholders and align them with evolving best practices. In addition, the study recommends value-driven marketing strategies such as implementing storytelling strategies, Value-Oriented Product Innovation, and Develop Values Scorecard Virtual Reality (VR) Values Training.
Keywords: value, SMEs, entrepreneurial development, Nigeria

INTRODUCTION
Scholars have consistently emphasized the influence of values on human behavior and decision-making processes. Though values serve as motivators and ethical compasses, guiding actions and justifying decisions, attitudes, and behaviors (Denen, 2020; Fritzche & Oz, 2007), the cherished values that once positioned Nigeria at the forefront in Africa and globally such as truthfulness, respect for labor, and productivity, are eroding, giving way to many shifting values that affect every facet of the nation (Nwenearizi, 2020), with significant repercussions for the country's economy and overall development. Existing research primarily concentrated on SMEs in advanced economies, which tend to be more profitable even without the advantages of significant economies of scale (for instance, Lu and Beamish, 2001; Child & Rodrigues, 2007; Stoian et al., 2016). Other studiescontributed valuable insights into how indigenous institutions like family ties, kinship, chieftaincy, religion, and cooperatives influence Nigerian SMEs (Omeihe *et al.*, 2021). Current studies propose integrating core business values into strategic activities to secure sustainable financing for their enterprises (Bieh & Boroh, 2023; Ibrahim & Shariff, 2016; Koc & Yayla, 2022). This assertion highlights the growing importance of understanding and implementing core values in SMEs despite the extensive research on the role of values in business and its implications for organizational performance in large corporations (Samorodov *et al.,* 2019; Zhou *et al.,* 2020; Zimon, 2020). This gap in research exists due to the misconception that SMEs are merely scaled-down versions of large enterprises (Darcy *et al.,* 2014). Thus, the impact of core business values inSMEs needs to be studied more within the information technology, hospitality, and transportation service sectors.

LITERATURE REVIEW
Values are abstract goals that signify what individuals hold in high regard and consider important. Values are crucial in shaping an individual's thoughts, emotions, and actions. They are integral to a person's identity and can be associated with various phenomena, behaviors, ideas, or objects (NOA, 2009). According to Koc and Yayla (2022), values are the driving force behind people's conduct and behavior, serving as fundamental guiding principles that impact different aspects of an individual's life. In essence,

values are a set of beliefs that distinguish humans from other living beings, encompassing an individual's perceptions, beliefs, attitudes, and behaviors. Values are typically resistant to change and remain relatively stable over time (Sagiv & Roccas, 2021; Rokeach, 1973; Schwartz, 1992). Values are not inherent but are acquired and learned through interactions within social structures. The significance of specific values varies among individuals and societies, often organized hierarchically, with more important values exerting greater influence on behavior (Rokeach, 1973; Schwartz, 1992). Values can be considered core values for a nation or organization when most people positively perceive them to guide their actions and achievements (NOA, 2009). Above all, values represent desirable, universal goals that transcend specific situations and contexts.

Core Business Value in SMEs

Core business values are the heart of SMEs, shaping identities and influencing interactions with customers, employees, and the broader community. Strategies of core business value can focus on how people interact (humility, respect, honesty), a person's business work (ingenuity, creativity, data-driven), or the individual responsibilities one will hold (consistency, quality, and reliability). Core values *evoke a sense of achievement for a business*. Everything decided or acted upon in a business is determined by those core values. This assertion is supported by Karadag (2015) and Joyner and Payne, D. (2002), who argued that a coherent set of ambitions and corresponding business practices help achieve goals in business and decision-making operations. Karadag found that SME owner-managers in Turkey should have faithfully followed any core business value strategy.Ekwueme and Nwosu (2020) argued that SME leaders who are successful in performance develop effective strategies for business growth with corrective actions as a response to variances. Ekwueme and Nwosu (2020) employed survey results of working capital management practices extracted from 214 SME businesses within eight (8) major towns in Central Ghana, with noticeably thriving business operations. Consequently, about 78% of the sample respondents needed to practice managing working capital standards.

The Concept of Value Orientation and Re-orientation

Value Orientation. Value orientation refers to the values, beliefs, and principles guiding an individual's or society's behavior, decisions, and actions. It encompasses the deeply ingrained cultural, moral, and ethical values that shape one's worldview, which can be influenced by cultural, social, religious, and personal factors. Value orientation occurs when individuals are guided by those ethical, moral, and personal values that guide individuals, groups, and societies in their actions, decisions, and behaviors (Hofstede & Bond, 1984). Alignment to such deeply rooted cultural, familial, and societal values suggestively influences how individuals or societies perceive the world, make choices, and interact with others. Nigerian administrators made concerted efforts to inculcate and sensitize individuals on foundational principles, beliefs, and ethical concepts considered important and worthy of pursuit. For instance, General Obasanjo's Jaji Declaration of 1970, Buhari's War Against Indiscipline (WAI), and General Buhari's MAMSER and Abacha's War Against Indiscipline (WAI) aimed to inculcate positive economic, social and political core values in the citizenry (NOA, 2019).

Value Re-orientation. Value re-orientation, often called values re-orientation, is a process aimed at changing or shifting the value system or set of beliefs and principles held by individuals or a society. Value re-orientation is a deliberate and systematic effort to reshape individuals' or societies' values, beliefs, and ethical foundations to align them with desired societal goals, standards, and cultural norms. There is an awareness that people are already aware of the core values. Thus, value re-orientation involves altering or emphasizing and promoting certain values to encourage desired behaviors, attitudes, and ethical standards while de-emphasizing or discouraging others from fostering certain behaviors, attitudes, and ethical standards (Denen,2020). Value re-orientation aims to adapt to changing circumstances, address shortcomings in current values, and align more closely with evolving personal or societal goals.

Despite several value orientation programs, Nigeria still battles with the deterioration of the traditional value system, which led to the institutionalization of a culture of greed, indiscipline, and corruption and the escalation of all forms of violent extremism. Value orientation and Value orientation are concepts that play crucial roles in shaping individual and collective behavior and beliefs; they are influenced by various external factors such as culture, environment, and social dynamics. Researchers and practitioners advocate for the entrenchment of strong values for the development and prosperity of Nigerian society along with individual positive change of moral character to renew the innermost nature(Okoli, 2018; Oyinlola, 2019). Scholars and practitioners frequently discuss the need for value re-orientation to address various socio-economic and environmental challenges (Okoli, 2018).

Value orientation represents the existing value system, while value re-orientation involves intentionally changing or adapting these values to address evolving societal needs and challenges. Value re-orientation is

paramount in Nigeria for several compelling reasons, particularly in addressing various social, economic, and political challenges. In Nigeria's intricate and diverse landscape, a nation characterized by a tapestry of cultures, histories, and aspirations, value re-orientation emerges as a powerful catalyst for transformative change. Key points highlighting the significance of value re-orientation in Nigeria include Changing Values for Positive Societal Outcomes and alignment with Moral and Ethical Standards (Bieh & Boroh, 2023). Value re-orientation is a bedrock upon which the citadel of transparency and accountability is built (Oyinlola, 2019). Others include Influence on Decision-Making (Schwartz, 2006), Sustainable and Economic Development, Environmental Responsibility, and Brand reputation. Long-Term Development: While value re-orientation may take time to yield significant results, its long-term impact on Nigerian society can be transformative. It can contribute to developing a more just, equitable, and prosperous nation.

METHODOLOGY

This study adopted a qualitative methodology and Multiple Case Study(MCS) to explore the significance of business core values in the long-term performance of SMEs. Qualitative researchers adopting inductive strategies as traditional deductive methodologies become inadequate in the rapid diversification of today's world (Flick, 2002). The qualitative methodology was influenced by Levitt et al.'s (2018) recommendation to transcend the limitations of a mere survey questionnaire and aim for analytic generalizability to conclude previous qualitative literature and provideiIn-depth, granular information from those closest to the phenomena of study (Creswell, 2013; Levitt *et al*., 2018). The logic and power of qualitative purposeful sampling derive from the emphasis on the in-depth understanding of information-rich cases, which one can learn a great deal about new issues of central importance to the purpose of the inquiry (Patton, 2015) and the capacity to allow direct insights from individuals with first-hand knowledge of the subject matter, permitting a comprehensive exploration of multiple realities through a limited number of participants.

The multiple case studydesign was appropriate in bringing understanding to each case nuances, meanings, and contexts by exploring a complex, context-dependent, or poorly understood phenomenon through comparative analysis (Yin, 2018) and comprehensively exploring various perspectives from diverse sectorsto facilitate the collection of relevant data and systematically connecting research questions with data collection processes, as per Leedy and Ormrod (2014). Each case was thoroughly examined using interviews, observations, and document analysis to explore the cases from multiple angles, offering opportunities for comparisons across several cases and the potential for literal and theoretical replication and analytical generalization (Yin, 2018). Consequently, findings apply to similar situations and contexts.

The study's target population was three SME owners and managers in the information technology (IT) sector, the hospitality, and the transportation sectors with over five years of managerial experience and held a solid grasp of human resource management within their respective entities. The researcher's expert knowledge was purposively used to select those genuinely grounded on providing rich insights and adhering to the principles outlined by Sedgwick (2013) and Yin (2018). Data was collected through semi-structured interviews, observational field notes, and a review of peer-reviewed scholarly papers and continued until data saturation was achieved, guided by the principles articulated by Patton (2015). The research questions provided a framework, direction cohesion, and boundaries in entrepreneurship—the clear research questions aligned to interview questions provided holistic perceptions of participant viewpoint. The face-to-face, one-on-one interview sessions provided the platform for the participants to share rich and incisive descriptions of processes and occurrences, enriched by experiential examples and facilitated by open-ended questions. Thus, interaction with participants, tone, and manner of the questions created an environment conducive to capturing more than just verbal responses. This approach facilitated the provision of reliable and detailed insights into the nuances and events relevant to the overarching research questions, aligning with Levitt *et al.* (2018) recommendations.It allowed for collecting extensive, multifaceted human experiences and a wealth of contemporary knowledge.

The study design provided -in-depth analysis, comparative analysis, and holistic perspective and achieved significant comprehension of participant situation to address the dearth of literature on core value orientation in SME development in Nigeria (Taylor & Thomas-Gregory, 2015; Creswell, 2013; Yin, 2018). Given the study's focus on uncovering core business value strategies and practices, this humane approach, exploring multiple bounded systems (cases) over time, was deemed most suitable for ensuring their enterprises' long-term performance and growth. Multiple case studies can also be used for theory development or testing. Researchers can refine or extend existing theories or develop new ones by comparing cases. Triangulation was necessary for examining conclusions from multiple vantage points to enrich and establish the inferences' validity (Hadi & José Closs, 2016).

Conceptual Framework

Schwartz's Theory of Basic Human Values

Schwartz's Theory of Basic Human Values, developed by social psychologist Shalom H. Schwartz, provides a comprehensive framework for understanding the core values that guide human behavior and decision-making (Schwartz, 1992, 2012).The comprehensive framework t classifies human values into a structured system and provides insight into the psychological, structural motivations underlying human values. The Theory emphasizes the importance of values in guiding behavior and shaping individuals' attitudes and preferences (Schwartz, 2006, 1992). Theory projects thecontent and structure as having a dynamic relationship but differ in scope and application (Rietveld & Brigitte, 2022). The two main components:

Cultural Value Orientations

Within Schwartz's Theory of Basic Human Values, Cultural value orientation refers to the idea that while people across different cultures share universal values, the relative importance and prioritization vary significantly from one culture to another. Cultural Value Orientations focus on understanding the dominant values within a cultural group or society. These broad and abstract values represent collective behavior's overarching, which helps explain how culture influences individual and collective value systems principles (Lee et al., 2022). Cultural psychologists often use Schwartz's Theory to explore how values align with established cultural dimensions. For instance, some cultures may be more individualistic, emphasizing self-enhancement values, while others are collectivist, emphasizing self-transcendence values like Benevolence and Universalism.

Personal Value Systems. Personal Value Systems pertain to values held at the individual level, specific to each person. It identifies a set of universal values and provides insights into how people make choices, set goals, and navigate their lives based on their value systems. They encompass various values that align with the predominant cultural values (Lee *et al.*, 2022). Schwartz's work emphasizes that individuals within the same culture can have different value hierarchies, as unique life experiences and beliefs influence personal values. These personal values can evolve and adapt over time (Schwartz, 1992; Lee *et al.,* 2022). Schwartz identifies ten universal values.

- Self-Direction: related to independence, creativity, and freedom of thought.
- Stimulation: associated with excitement, novelty, and variety in life.
- Hedonism: emphasizing pleasure, enjoyment, and the avoidance of pain.
- Achievement: related to personal success, competence, and ambition.
- Power: connected to social status, control over others, and dominance.
- Security: emphasizing safety, stability, and harmony in life.
- Conformity: Values related to self-discipline, obedience, and preserving tradition.
- Tradition: Values associated with respect for customs, religion, and cultural heritage.
- Benevolence: Values emphasizing concern for the welfare of others and social justice.
- Universalism: Values connected to social justice, equality, and the protection of the

Schwartz further categorized these ten values into four higher-order and Two-Dimensional Structure of Values :

Openness to Change VS Conservation: This dimension reflects the tension between values that emphasize openness to new experiences, change, and novelty (e.g., self-direction, stimulation) and values that prioritize the preservation of tradition, stability, and conformity (e.g., security, tradition).

Self-Enhancement VS Self-Transcendence*:* This dimension represents the conflict between values that prioritize self-interest, achievement, and personal success (e.g., power, achievement) and values that emphasize the welfare of others, empathy, and the well-being of the broader community (e.g., benevolence, universalism).

Individualism and Entrepreneurial Success

Schwartz's Theory of Basic Human Values employs the dimension of individualism-collectivism as a key broader framework for understanding human value and influencing various aspects of behavior and decision-making. The values people prioritizeinfluence their motivation and behavior. The values guide their decisions, actions, and life goals. Cultural value orientation also recognizes that cultures can evolve and change over time. As societies undergo social, economic, or political transformations, the importance of certain values evolves within generations within a culture. Scholars use Schwartz's Theory to conduct cross-cultural research comparing how values are prioritized in different societies, which can shed light on how culture shapes individual and collective behavior and provides a valuable framework for comprehending the complex interplay of values in shaping our choices and actions, which are business value management practices and indicators of SMEs' performance, growth and profitability. The

implications extend to major practices affecting business sustainability, which vary from one context to the other. Depending on how well values align, personal value systems can lead to compatibility or conflict with others. For example, individuals who prioritize self-direction may have conflicts with those who emphasize conformity.

Benevolence And Entrepreneurship in Nigeria. Benevolence, as a core value within Schwartz's Theory of Basic Human Values, plays a pivotal role in shaping entrepreneurial behavior and outcomes, especially in SMEs.A concern for the welfare of others holds significant importance in Nigeria's cultural context (Gelfand et al., 2011). Nigerian entrepreneurs who align their ventures with benevolent values tend to resonate with the local culture (Obalola et al., 2019). This alignment can enhance the social impact of Small and Medium-sized Enterprises (SMEs) and their acceptance within the communities. Benevolence leaders are likelier to engage in socially responsible business practices, contribute to community development, build strong customer relationships, and foster positive employee relationships than others.

Research Questions

RQ 1*: How have SME owners and managers in Abuja, Nigeria, implemented human resource management strategies for their enterprise's long-term performance and growth?*

RQ2:*How are leader's value orientation related to organizational goals?*

Interview Questions

1) Elaborate on how your personal values influence and inform the decisions you make as a leader in the SME sector.
2) What core business values do you find essential to facilitate and maintain business growth over time?
3) Are there additional information to share regarding human resource management strategies to drive growth within your organization?
4) How do you envision enhancing or modifying your professional development programs to better serve the needs of SME owners and leaders in Nigeria?

Open-ended research questions fundamentally aid qualitative studies following participants' unrestricted and comprehensive responses advantageous when investigating intricate phenomena without preconceived constraints. Their use encourages participants to share rich, context-specific insights, enhancing the study's depth, capturing real-life complexity, and fostering a deeper understanding of the research subject; participants' responses can unveil unanticipated aspects, potentially leading to new lines of inquiry and generate additional research questions (Ravitch & Carl, 2016; Yin, 2018).

Table 1 - Examples of Data Extracts and Codes from Interview Question 1

	Data Extracts	Codes	Categories
P1	"Having created a business line through sound innovation, we were lucky to be guided on sound business values from my mentor in the business. I must establish a good value proposition for my organization system based on my integrity stance."	- Integrity - Sound Business Values - Mentors in business, - Value preposition	Sound Business Values Mentors in Business, Value preposition Integrity
P2	"I started my business through my savings, and I have taken a keen interest in the works of the national orientation agency Abuja on value re-orientation for business leaders."	- Savings, - Business leaders - Credit facilities - Value re-orientation	Business leaders Value re-orientation
P3	"I used my savings to commence the business, and the profits are reinvested years after to build, in addition, imbibe the tenets of sound business values to retain my customer and grow my business, and I gain loyalty from my customer."	- Credit facilities, - Loyalty - Sound Business	Profit reinvestment. loyalty Sound Business Values Mindset Change

		Values - Mindset Change	
P4	"I started this business with personal savings and support from my mother and my brother, though very small, with consistency in managing my finances and credit support from my banker based on the principles of prudence and Resilience of the workforce. I have adopted this in my relationship with suppliers. I have grown over time."	- Sound Business ideas lead to - Prudence - Ethical Value - Resilience	Prudence Ethical Value Resilience
P5	"I started the business through savings, supported through loans from a microfinance bank. I also make use of sound business values to build loyalty. The bank is willing to provide more lines of credit because of the value of professional conduct from my workers, sound principles and Resilience."	- Savings, - Loyalty - Value of professional conduct - Resilience	Savings Loyalty Value of professional conduct Resilience
P6	"Having started with longtime savings, and as for financial strategies, I use market leverage technology, social media, guest rewarding, business partnership, email marketing, and guest feedback based on our core values as an organization."	- Core Values - Technology - Business partnership, - Guest rewarding.	Core Values Technology Business partnership, Guest rewarding.

Table 2 - Examples of Data Extracts and Codes from Interview Question 2

	Data Extracts	Codes	Categories
P 1	"Since 2014, we introduced respect for core business values where we offer our suppliers a premium of 5% monthly investment capital if they show respect for the environment and integrity of our processes."	- Investment program - Strategic planning - Mindset Change	Strategic planning practices Mindset Change
P 2	"Effective management of our human resources with long time view is fundamental in driving organizations through Integrity of our workforce. "	- Human resources management with a long-term view. - Integrity	Strategic planning practices
P 3	"To grow an organization is nonroutine; you need to be dynamic and strategic because the business environment is ever-changing."	Grow organization. Dynamism Strategic	Entrepreneurial skills Strategic management
P 4	"In this business, you need to have enough money and be able to manage human resources to grow profit."	Enough money Human Resource Management Investment knowledge to grow profit	Strategic financial practices
P 5	"In this competitive sector, it is good to have a strategic plan that keeps you in the growth path and maintains customer satisfaction."	Competitive stance Strategic Plan Customer satisfaction	Competitive advantage
P 6	"One should be able to monitor human resources management and profiling, ensure staff come to work on time, are held accountable, and manage customer expectations to build resilience of the system."	Monitor human resources, Coming to work on time, Proactive customer satisfaction. Resilience	Strategic financial practices

Table 3 - Examples of Data Extracts and Codes from Interview Question 3

	Data Extracts	Codes	Categories
P1	"We have gottenprofessional advice from professional service firms to manage our human resource needs."	- Professional service firms - Human Resources needs	Human Resources needs
P2	"Effective management of our human resources with long time view is fundamental in driving organization's growth. "	- Human resources management. - Organization growth	Human Resource Management
P3	"We got support to fund our human resource management strategy."	- Human Resource Management strategy	HR management Strategy
P4	"We have internal human resources personnel to handle our HR needs."	- Internal HR personnel support	HR Support
P5	"I am trained in HR management, and I use my skill for the good of the organization growth."	Trained as HR person	Trained as HR person
P6	"One should be able to monitor human resources management and profiling, ensure staff come to work on time, are held accountable."	Monitor human resources, Coming to work on time	Monitor HR

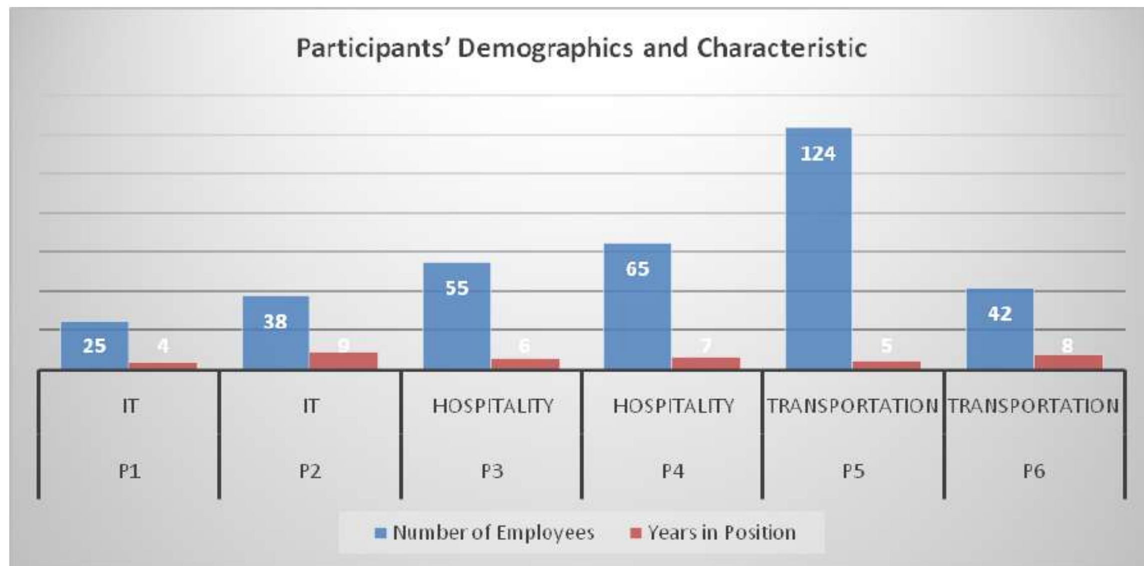
Table 4 - Examples of Data Extracts and Codes from Interview Question 4
How do you envision enhancing or modifying your professional development programs to serve better the needs of SME owners and leaders in Nigeria?

	Data Extracts	Codes	Categories
P1	"Having created a business line through sound innovation, we need professional development of personnel to have a good attitude and unique business mindset."	- Business Innovation - Unique Business Mindset	Mindset Change
P2	"I have taken a keen interest in the works of the national orientation agency Abuja on value re-orientation for business leaders to a change in mindset."	- Change in Mindset - Value re-orientation	Value re-orientation Mindset Change
P3	"I imbibe the tenets of sound business values and encourage my staff to have good attitude to retain my customer."	- Sound Business Values - Good Attitude	Good Attitude
P4	"I started this business with few staff but have grown to a staff of 50 personnel. Now I encourage them to adopt value re-orientation in their outlook for staff-customer relationship"	- Value Re-orientation	Prudence Ethical Value Resilience
P5	"I made use of sound business values to build loyalty. My worker imbibes the value of professional conduct because they attended seminars from the National Orientation Agency."	- Professional Conduct - Sound Business Values	Professional Conduct Sound Business Values
P6	"Having well well-trained workforce grew my clientele as I knew the value of good customer relationships and attitude."	- Good attitude	Good Attitude

Table 3: Participants Data outlook

Participants	Business Sector	Years Commenced Business	Number of Employees	Gender	Years in Position	Education Level
P1	IT	2006	25	Male	4	Bachelor's degree
P2	IT	2002	38	Female	9	Master's Degree
P3	Hospitality	2008	55	Female	6	Bachelor's degree
P4	Hospitality	2011	65	Male	7	Bachelor's degree
P5	Transportation	1997	124	Male	5	Master's Degree
P6	Transportation	2007	42	Female	8	Bachelor's degree

Fig 1: Chart of Participant Outlook



Data Analysis

The data analysis process employed a systematic and comprehensive approach to extract meaningful themes and insights from the qualitative data. It involved multiple rounds of analysis, triangulation of data sources, and constant reflection to enhance the validity and robustness of the findings (Rowley, 2002; Yin, 2018**).**

1. Organization and Transcription: The initial data analysis stage involved carefully organizing and transcribing interview data. Data were systematically analyzed, transcribed, and categorized into nodes. NVivo14® data analysis software was used to facilitate identifying the themes.
2. Analysis of Interview Data: Emerging themes were identified and categorized by question. These emerging themes were then compared with themes arising from the existing scholarly literature, and the findings were recorded (Schutt, 2014).
3. The step-by-step phase included uploading raw data into NVivo14® software, conducting word searches using queries, retrieving word clouds and histograms through queries, and generating word trees. These outputs were used to guide the coding of participant responses. While NVivo software 14 was used for organizing data to enhance dependability, a laborious and time-consuming manual coding technique ensured that every data segment was considered in determining the emerging categories and themes that we found relevant to the RQ
4. Iterative Analysis: The data analysis process was repeated in three iterations. The findings were compared for consistency during each iteration, and the themes were further refined.
5. Triangulation of Data: Triangulation was achieved by drawing on multiple sources of evidence, including interview responses, document reviews, and observations. This approach helped confirm the identified themes and categories for addressing the research questions.

6. Convergence and Validation: The convergence of findings from various data sources, combined with triangulation, added to the robustness and validity of the inferences. Triangulation was valuable for examining conclusions from multiple perspectives, contributing to the study's validity (Hadi & José Closs, 2016; Hyatt et al., 2014).
7. Constant Comparison and Reflection: The data analysis process involved constant comparison, simultaneous critical thinking, ongoing reflection, and synthesis to extract credible themes from the qualitative data. This process captured the essence of the data and facilitated a deeper understanding of the phenomenon.
8. Member Checking and Triangulation: The researcher integrated member checking and triangulation to assess the strength of each element in the classification of core themes and subthemes.

Discussion

The qualitative multiple-case study was designed to provide a rigorous understanding of the nature of respect for core business valuesand human resource management strategies required in Nigerian SMEs. Hence, the RQs for this study: *How have leaders of* SME owners in Abuja, Nigeria, implemented human resource management strategies for their enterprise's long-term performance and growth*? Moreover,* **RQ2:** How do leaders value orientation related to organizational goals? Within the study, in-depth descriptions of participants' strategic experiences were obtained in managing various organizations by conducting detailed interviews with six SME owner-managers. The emerging themes identified and categorized by question include.

Emergence of Themes

Four themes relevant to this study emerged from the thematic analysis of data. These themes include (a) exhibiting Integrity to gain employee and customer loyalty, (b) staying through to the core business values through Resilience, (c) taking initiatives and being innovative d) the need for attitudinal and mindset change through value re-orientation. Theme 1. emanated from interview question 1, theme two from interview question 1&2, theme three from question 2, and theme four from question 1&2. The rest of this section contain the emerging themes and extracts of specific participants' quotes that support these themes.

Integrity

Within the studied SME organizations, the theme of 'Integrity' emerges as a core business value skill necessary for business sustainability. The research findings reveal that exhibiting Integrity towards suppliers and clients is imperative for SME success. This aligns with the assertion by Cottrell (2007)that Integrity is highly valued, especially by business owners. Business owners known for their Integrity are considered dependable, and their reliability in keeping promises fosters trust. Clients depend on these SME owners because they can rely on them to successfully deliver products or services. In this context, Integrity refers to the quality of honesty and upholding strong moral principles, reflecting moral uprightness. This definition underscores the importance of aligning one's actions with deeply held values, maintaining honesty, and consistently keeping promises.

Integrity is fundamental in promoting honesty, reliability, and moral uprightness in business dealings and is closely related to business ethics. Moreover, its practice is essential for maintaining client trust and fostering employee loyalty. The findings suggest that Integrity within studied SME organizations was pivotal in sustaining their business operations, fostering strong client relationships, and promoting employee loyalty. This concurs with the findings of scholars and practitioners on the significance of Integrity in ensuring the ethical fulfillment of various business objectives and centrality in business ethics (Jacobs, 2004; Rendtorff, 2012). Moreover, SME owners who prioritize Integrity also experience increased employee loyalty. This resonates with the argument by Aboobaker *et al.* (2021), suggesting that Integrity contributes to employee well-being and, as a result, enhances employee loyalty. This loyalty positively impacts SMEs as it helps retain qualified professionals whose expertise adds value to the organization.

Resilience

The theme of 'Resilience' emerged from data analysis collected through semi-structured interviews and document reviews. Notably, 50% of the participants emphasized the significance of Resilience for SME owners in Abuja Federal Capital Territory, Nigeria. In this context, Resilience reflects the ability of entrepreneurs and their businesses to withstand difficulties, adapt quickly, and recover effectively in the face of adverse external and internal environments. This Resilience is vital for managing businesses that operate under risk and strive for innovation (Santoro et al., 2020).

The participants' responses underscored the essential elements of Resilience, such as the willingness to venture into new opportunities. The response of P3, that "business is a risk and challenges, and I keep venturing into new opportunities, even if it needs training, I go for it", exemplifies the venture disposition in acquiring requisite education, which enhances financial strategies for business performance and

sustainability. This reflects the entrepreneurial disposition to continuously seek education and enhance financial strategies, contributing to business performance and sustainability. According to Jackson et al. (2021), Resilience involves successfully adapting to challenging life experiences by being mentally, emotionally, and behaviorally flexible and adjusting to external and internal demands. Resilient helps SME owners invest their time and mental and emotional energy in finding solutions. Resilience, therefore, encompasses the ability to adapt to difficulties, respond quickly, and recover effectively in challenging conditions. It involves a commitment to continuous learning, innovation, and developing robust strategies for business success. Resilient business leaders focus on finding solutions and invest in their well-being and relationships to thrive in challenging business climates.

Taking Initiatives

The theme of 'Taking Initiative is a fundamental core business value necessary for achieving business sustainability and entrepreneurial development. This theme emerged from data analysis collected through semi-structured interviews and document reviews, with 83.33% of the participants emphasizing its importance for SME owners in Abuja Federal Capital Territory. Taking Initiatives and being innovative is crucial for exploring new options and prospects, essential for sustaining businesses in this region. Christensen (1985) underpins that taking the Initiative, particularly when transitioning, enables a radically new approach to planning and managing the organization, which is vital for SME growth and development.

Participants in the study highlighted adopting new ideas as a characteristic of taking Initiative involving thinking and acting without external prodding, ultimately driving entrepreneurship. Expressions from participants of the study, such as "proactive customer satisfaction," "investment in knowledge to grow profit," and "guest rewarding," demonstrate that these SME owners are proactive in their approach to business. They take Initiative by being resourceful and working without always being told what to do. This proactive stance is fundamental to innovation, which involves successfully implementing new ideas and creating value for customers and stakeholders. As highlighted by the participants, innovation starts with a new idea and involves key elements like collaboration, ideation, implementation, and value creation. Creativity and innovation are essential for navigating the challenges and opportunities of the business landscape in Nigeria.

Need for Attitudinal and Mindset Change through Value Re-orientation

The theme of Achieving attitudinal and mindset change through value re-orientation in Nigerian SMEs emerged throughout the study after data triangulation from interviews, observations, and document analysis, suggesting that the traction required leaders to be deliberate. The theme requires a comprehensive and strategic approach. Fostering attitudinal and mindset change through value re-orientation is a gradual but necessary process. By consistently reinforcing the importance of the themes of Integrity, Resilience, and taking Initiative, SME leaders can create a culture that aligns with these values and, in turn, leads to business sustainability and growth while contributing to a more ethical and prosperous Nigeria. The process is a transformational leadership agenda of demonstrating a personal commitment to honesty and hard work to instill in their organization. Implementing value re-orientation requires educating and training employees. Workshops, seminars, and ongoing training programs should highlight these values' positive impact on their careers and the organization. In addition, to successfully re-orient the mindset of the people, there must be clear communication, incentives and recognition, zero-tolerance for corruption, ethical decision-making framework, continuous monitoring and evaluation, collaboration with government and industry bodies, community engagement and adaptation, and flexibility.

INTERPRETATION

How individuals develop personal and broad values holds important implications for SME leaders and practitioners.Findings from this study support existing knowledge in the literature regarding core business value strategies and practices in SMEs. The four themes formed the basis for interpreting the findings from this study and considering the implications and recommendations for policy development and practice. The business fundamentals are motivating factors to influence decision-making to grow their business**.** The themes are motivating leadership factors to drive SME business decisions in the 21st century into a competitive advantage and organizational performance. The themes should inform the company's culture, hiring practices, and product ideation (Svatošová, 2019, 2017).

Schwartz's Theory has practical implications for policymaking and interventions by deepening understanding of the appropriate core values in informing decision-making processes with widespread applicability in psychology, sociology, marketing, and cross-cultural studies in consumer behavior, organizational culture, political preferences, cultural differences, and environmental attitudes. Findings

align with Schwartz's Theory for comparisons across several cases, enabling theoretical replication and analytical generalization by researchers, policymakers, and business operators (Yin, 2018).Theory to investigate how diverse value orientations impact decision-making and social interactions in the context of entrepreneurship in Nigeria. Schwartz's Theory elucidates how cultural values such as benevolence and individualism, alongside personal values, shape entrepreneurial behavior and outcomes. Recognizing and leveraging these values can promote more culturally relevant and socially impactful entrepreneurship in Nigeria. Schwartz's Theory served as a comprehensive framework to classify the core values into a motivational structured human resource system.Consequently, the emerging themes underscore their importance, albeit less prominent values.

Peacebuilding is germane in maintaining social order in a heterogeneous entity like Nigeria. For economic, social, infrastructural, and political growth, machinery should be in place to reduce conflict. When it does, there must be means to help the conflicting parties transition from the traumatic effect caused by the conflict(Okechukwu, 2022).Study findings can mitigate conflicts, predict behavior, design effective cross-cultural interventions, and respect the values and norms of different cultures.The Theory introduces a hierarchical structure where values are organized along two continua: openness to change vs. conservation and self-enhancement vs. self-transcendence. This oppositional structure helps us understand the inherent conflicts and trade-offs between values. Nigerian SME owner-managers need to adopt specific strategies conscientiously that will support conflict resolution.

MCS is apt to comprehend the complex interplay of values in shaping our choices to elicit in-depth and diverse knowledge. The robust data from triangulated data has the credibility to solve complex situations. The findings recommend diverse practices of business value strategies and practices. The study methodology and design addressed the complex organizational and environmental issues affecting Nigerian SMEs. Since the findings tilted towards a dynamic business strategy anchored on sound business fundamentals to grow the business, there is, therefore need for strategic value-re-orientations toward the generated values and themes of the study. Consequently, SMEs must adapt to the changing business landscape while staying true to their core values.

CONCLUSIONS AND RECOMMENDATIONS

This qualitative multiple-case study examined knowledge gaps among SME owners and managers in Nigeria regarding core business value strategies and practices and the implications for long-term business sustainability in information technology, hospitality, and transportation service sectors. In alignment with RQs and their exploratory nature, open-ended questions addressed the need for more literature. This research cast doubts on the knowledgeability of Nigerian SME owner-managers regarding the phenomenon of core business value strategies and practices and implications for enterprise growth and the long-term sustainability of their enterprises.

Studies in SMEs' core business values are relatively developing in the scope of the study within the Federal Capital Territory of Nigeria. As the business landscape evolves, SMEs must articulate core values that align with the dynamic technological dynamics of the 21st century. By re-orienting individuals on Integrity, Resilience, creativity, and sustainability, SMEs can thrive in the digital age while remaining socially responsible and customer-focused. Values can respond to life experiences, cultural shifts, or personal development. They encourage SMEs to leverage technological advancements, promote ethical practices, and engage with stakeholders in new ways. SMEs can thrive in the 21st century while remaining true to their foundational value.

Consequently, SMEs should implement a well-tested management policy anchored on their core business values that will be a guiding light to transform short-term goals and facilitate growth for SMEs' sustainability. However, every strategy is temporary, as the business environment is dynamic. The study implies further discussion on diverse areas of strategic management of SMEs.

This study's recommended business core values for Small and Medium-sized Enterprises (SMEs) can guide the organization's culture, decisions, and operations. These values are crucial for establishing a strong ethical foundation and ensuring long-term success. Value-orientation strategies should be continuous and widespread for SMEs to be sustained. We recommend regular workshops and training sessions to align SME owners, employees, and stakeholders with the evolving core values of the business. These workshops can provide a platform for open dialogue and idea exchange, fostering a shared commitment to these values. Some areas of concern include Ethics in AI and Automation, Digital Literacy Programs, Adaptability Training, and Moral Dilemma Workshops. To further instill the core values using the tenet of re-orientation, promote **value-driven marketing strategies** that focus on identified core values and sustainable practices to attract customers who align with these principles. Ensure that the core values are

extended to the entire supply chain. This involves working with suppliers and partners who share similar values, particularly regarding ethics and sustainability.
Other innovative recommendations include **Storytelling for Values** by implementing storytelling strategies within the organization. Encourage employees to share stories highlighting instances where core values were upheld to reinforce values and serve as a powerful internal and external communication tool.**Value-Oriented Product Innovation** can enable SMEs to link product or service innovation directly to core values. Create a culture of innovation that aims to better align with the values of ethics, sustainability, and customer-focused principles. Develop**a Values Scorecard**quantifying how well the SME adheres to its core values. Finally, **Virtual Reality (VR) Values Training can**incorporate modules that immerse employees in scenarios where they must make decisions aligning with core values. This interactive approach can help values resonate more deeply. This recommendation can prove the company's commitment to its core values. Understanding this dynamic aspect is crucial for analyzing how values evolve.

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EFFECT OF EMPLOYEE JOB INVOLVEMENT AND ENGAGEMENT ON ORGANIZATIONAL EFFECTIVENESS (A STUDY OF SELECTED MULTINATIONAL FIRMS IN SOUTH-SOUTH, NIGERIA)

Duke, Iniobong A., Okebaram, Sunday M. and Emerole, Gideon A.
Michael Okpara University of Agriculture, Umudike

ABSTRACT
This study focused on the effect of employee job involvement and engagement on organizational effectiveness (A Study of Selected Multinational Firms in South-South, Nigeria). The study sought todetermine the effect of employee participation on the job satisfaction of Selected Multinational Firms in South-South Nigeria and ascertain the effect of role congruence on the return of Selected Multinational Firms in Southeast Nigeria; the study adopted a cross-sectional research design. The researcher adopted a primary data source to collect information from the respondents. The target population is eighty thousand five hundred and four (8504). Using a sample of 382, our finding shows a significant effect of employee participation on job satisfaction with p-value =.015<.05% significance level. The study concluded that role congruence significantly affects the return of Selected Multinational Firms in South-South, Nigeria with p-value=.009< .05% significance level. The study recommended that the organizations under the study should continuously improve employees' ability to give meaningful suggestions and participate more in decision-making as this enhances organizational performance. Measures that will increase employee participation and organizational commitment should be implemented.

Keywords: Employee Job Involvement and Engagement, Participation, Role Congruence and Organizational Effectiveness

INTRODUCTION
Job involvement and engagement are generally described as an attachment to one's job that exceeds normal levels of commitment. The employee can become so involved with his job that it affects performance in other life role areas. "The degree to which an employee is engaged in and enthusiastic about performing their work is called job involvement". Business managers are typically well aware that efforts to promote job involvement and engagement among staff tend to pay off substantially since employees will be more likely to assist in furthering their company's objectives. Consequently, job involvement and engagement are the willingness of a person to work hard and apply effort beyond normal job expectations (Adebayo, 2012). Job involvement and engagement are how employees immerse themselves in their jobs, invest time and energy, and view work as a central part of their lives (Newstrom & Devis, 2009). In organizations today, job involvement and engagement are seen as an individual's psychological identification or commitment to his / her job. It is the degree to 'which one is cognitively preoccupied with, engaged in, and concerned with one's present job.

Job involvement and engagement involve the internalization of values about the goodness of work or the importance of work in the individual's worth (Lodahl & Kejner, 2015). Individuals who display high involvement and engagement in their jobs consider their work a very important part of their lives, and whether or not they feel good about themselves is closely related to how they perform in their jobs. In other words, for highly involved individuals, performing well on the job is important for their self-esteem (Lodahl & Kejner, 2015). It is very proper and practical for organizational leaders to function as figureheads and managers who can inspire and motivate staff to be highly committed and effective in delivering their jobs. In the long run, this will bring about organizational goals and objectives.

Interestingly, job involvement and engagement are argued to be associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work (Saks, 2006). Similarly, the factors that most influence job involvement and engagement are fairness, care and concern for employees, and trust. In order to meet these criteria, firms have followed many paths in a quest to connect human resource and management strategies with bottom-line financial success (Saks, 2006).

Consequently, job involvement and engagement take place when employees are highly committed to their jobs, when they are interested and indeed excited about what they do when they display loyalty, faith and pride in the organization, and when there is a willingness to advocate for their organization and a sense of personal responsibility. In addition, managers agree that modern business demands higher productivity

and more efficiency than in previous times. Organizations are increasing performance to place their company ahead of their competitors. At some point, satisfied employees who are content with their work experience serve as a good formula for success. Also, a satisfied employee will want to stay with a company and contribute to the workforce stability and productivity of the organization. Though satisfied and stable employees may be needed in the organization, they may not be enough to bring necessary business results (Shaufeli & Bakker, 2004). This study examined the effect of employee job involvement and engagement on organizational effectiveness (A Study of Selected Multinational Firms in South-South, Nigeria).

In Nigeria, especially in the South-South today, there has been much controversy about whether an employee would participate in managerial decision-making. Many researchers argue that employees should contribute to decision-making, especially where it affects them or their jobs (Adeola, 2004). The major problem with employee participation and involvement is resistance to change by management. Managers create an organizational culture that reflects their philosophies and management style and reinforces their strategies and control. Employee participation and involvement pose a threat to an autocratic manager. Many managers tend to resist participation because it is contrary to the habits that formed their ways of thinking and behaving. In addition, failure to respond to an employee recommendation is an example that reduces employee participation (Busck *et al*., 2010). Employee non-participation in decision-making may lead to low performance in an organization, non-participation in decision-making demoralizes employees and employee non-participation results in conflicts between management and employees and also leads to indifference to the decision reached by the organization. If management does not indulge in employees' endorsements, employees rapidly conclude that management has no interest in their ideas. Many researchers have taken a more universal approach to studying employee participation, arguing that participative decision-making requires a certain context over and beyond a set of programs and techniques (Denison, 2009).

Without redesigning work, employee participation efforts can have a negative effect. Participative approaches such as delegation gave mixed results, especially in multinational companies. Although multinational companies have done much in their respective organizations, failure or lack of worker participation and involvement results in poor quality services, customer retention, turnover, lost morale, performance and profits (Aw *et al*., 2007). Conversely, bad policy and lopsided decision-making seem to be among the major challenges inhibiting the progress of multinational companies in Nigeria, which has created many unresolved problems between management and the employees in the organization, resulting in chains of industrial actions and a faceoff between management and employees. The inability of management to develop good policy, knowledge, protocols, and skills that incorporate support and optimal decision design for their organization is troubling, and this seems to be the norm rather than the rule in companies in Nigeria, which have retrograded and repressed the performance of these multinational companies in recent times (Busck *et al*., 2010).Against this backdrop, the study used selected multinational firms in South-South Nigeria to determine the effect of employee job involvement and engagement on organizational effectiveness. Furthermore, it sought to determine the effect of participation on job satisfaction and role congruence on the returns of these firms.

REVIEW OF LITERATURE

Employee Job Involvement

Involvement refers to the level of participation by members in an organization's decision-making process. It also refers to the sense of responsibility and commitment engendered (Denison, 2007). Involvement entails building human capacity, ownership and responsibility. It is necessary as it leads to a united vision, values and purpose. Employee Involvement is also called participative management and refers to the degree to which employees share information, knowledge, rewards, and power throughout the organization (Randolph *et al*., 2008). McShane and Von Glinow (2009) opine that when there is job involvement, employees have some authority in making decisions that were not previously within their mandate. They stated that employee Involvement extends beyond controlling resources for one's job; it includes the power to influence decisions in the work unit and organization. The higher the level of involvement, the more power people tend to have over the decision, process and outcomes.

Along with sharing power, employee Involvement requires sharing information and knowledge because employees require more knowledge to make a meaningful contribution to the decision process (McShane & Von Glinow, 2009). Employee participation has become an important part of corporate decision-making because it is integral to knowledge management. This implies that corporate leaders realize that employee

knowledge is a critical resource for competitive advantage, and as such, they encourage employees to share this knowledge.

Different forms of job involvement exist in organizations. Formal participation occurs in organizations with established structures and formal expectations supporting this form. Informal participation occurs when casual or undocumented activities occur at management's discretion. Job involvement can also be voluntary or statutory. It is voluntary when employees participate without any force or law. It is statutory when the government legislate its activities (e.g. Codetermination, which varies from country to country) (Strauss, 2008).Employee participation can also be direct or indirect. Direct participation occurs when employees personally influence the decision process. Representative participation occurs when peers represent employees (e.g., work council in the European Codetermination system) (McShane & Von Glinow, 2009).

A moderate level of job involvement entails employees being more fully consulted individually or in groups. They are told about the problem and offer their diagnosis and recommendations, but the final decision is still beyond their control. Employees reduce costs through recommendations to senior executives (Gowen & Lesieur, 2012). The highest level of involvement occurs when employees have complete power over the decision process. They discover and define problems, identify solutions, choose the best option, and monitor the result of their decision (McShane & Von Glinow, 2009). Involvement is the degree to which the employees of an organization are willing to work. Individuals willing to work hard are highly involved, whereas individuals without this willingness are lowly involved. Job involvement (JI) has been conceptualized as the degree to which one is cognitively preoccupied with, engaged in, and concerned with one's present job. Job involvement is "psychological identification with a job" (Kanungo, 2012). This definition implies that a job-involved person sees his or her job "as an important part of his self-concept" and that jobs "define one's self-concept in a major way" (Kanungo, 2012).

Two components of job involvement have been identified: job involvement in the role (JIR), which is the degree to which one is engaged in the specific tasks that make up one's job, and job involvement in the setting (JIS), which indicates the degree to which one finds carrying out the tasks of one's job in the present job environment to be engaging. Employees will likely be satisfied and develop a strong attachment to an organization with a certain prestige (a favourable reputation) as part of his/her connection with glory. Strong identification with one's organization may translate into high job involvement. On the other hand, some researchers also argue that job involvement is a personal characteristic. Therefore, it is less likely to be influenced by organizational factors and more likely by personal characteristics.

It has been argued that the degree to which employees are involved in their jobs can be influenced by situational-related factors (i.e., experiences and psychological reactions to the work). A favourable organizational image fosters an employee's identification with her/his organization. A theoretical framework relating job involvement to its antecedents correlates and consequences and reports meta-analyses of 51 pairwise relationships involving job involvement. Results of the meta-analyses support research suggesting that job involvement is influenced by personality and situational variables.

Studied by Kanungo (2006). He tried to exclude any doubt about job involvement and enhance the measurement inadequacies in the previous research. Job involvement is the individual's belief towards his or her present job, and he also stated that job involvement acts as a catalyst to satisfy the individual's present needs. In addition, he clarified the difference between job and work. He defined a job as an individual's current work, whereas a job is general work. Job involvement is the extent to which individuals are ego-involved in their work.Job involvement is seen as the degree of identification that employees realized in their jobs and the degree of importance they perceived (Preuss & Lautsch, 2002).

Job involvement is one cognitive need fulfilment, which assists him or her in working harder and boosting his or her performance. Indeed, a higher degree of job involvement among the members of an organization is essential to enhance organizational effectiveness. Besides that, there are four ways to categorize job involvement, which consists of (a) active contribution to the job, (b) work as the central life of interest, (c) performance compatibility with the self-concepts, and (d) performance as central to self-esteem. Ramsey, Nachiket, (2014). stated that employees who view their work as the central life of interest will have a greater opportunity to fulfil their major needs. Employees who assist actively in their jobs, which provide the chance to make decisions and play an essential role in the organization's goals, will assist them in obtaining high self-esteem and self-regard. In this research, the study adopts Kanungo's definition of the job involvement aspect, as most of the research on job involvement relies on his definition. Also, highly job-involved individuals would have fewer excuses (such as illness or transportation problems) and pay more attention to their jobs, reducing absenteeism and turnover intention.

Moreover, based on the research of Preuss and Lautsch (2002), cultivating job involvement is an essential organizational objective, as many researchers believe it is a primary stimulus of organizational effectiveness and individual motivation. Finally, Chughtai (2008) argued that job characteristics, such as job autonomy, task identity, skill variety, task significance, feedback and supervisory behaviours, such as participative decision-making, leader consideration, and amount of communication, have significantly linked to job involvement. According to Lodahl and Kejner (2015) held that job involvement encompasses four subdimensions:

a) Response to work: Lodahl and Kejner used the expectancy theory to elaborate on this dimension. Under this theory, it has been defined that employees will respond to their work based on different expectations about the work they possess, and the extent to which these expectations are achieved will be able to determine the level of job involvement they experience. Robinson (2004) criticized that employees" need fulfilment due to the congruence between job expectations and the job itself will produce a higher level of job involvement.

b) Expressions of being job involved: It has been explained that the expression of employees on job involvement is different from one another with the level of job involvement experienced. For instance, some employees may state they have high job involvement by thinking of the job even when not at work. Conversely, others may feel depressed if they fail at something related to the job (Lodahl & Kejner, 2015)

c) Sense of duty towards work: A highly involved individual would have a great sense of duty towards work. It is because they feel great about their work. For instance, an employee is willing to work overtime without pay to complete an assigned task.

d) Feelings about unfinished work and absenteeism: A highly involved employee will try to prevent being absent from work and feel guilty about unfinished work (Lodahl & Kejner, 2015).

Theoretical Framework

Kahn Model of Employee Engagement by Kahn (1990)

Kahn (1990) was the first academic researcher who used the term employee engagement and defined the term employee engagement as "the simultaneous employment and expression of a person's "preferred self" in task behaviours that promote connection to work and others, personal presence and active full role performance." Kahn (1990) developed the first grounded personal engagement and disengagement model. According to Kahn's engagement model, employees can be engaged on three levels: physical, emotional, and cognitive. Three psychological conditions affect these three levels: meaningfulness, safety and availability. These conditions influence the performance of employees at their work Sakovska (as cited in Kahn, 1990). Kahn (1990) has also found that workers were more engaged at work in situations that offer them more psychological meaningfulness and psychological safety and when they were more psychologically available. He also examined why the three psychological conditions of meaningfulness, safety, and availability are important to understand fully why a person becomes engaged in their work. He defined meaningfulness as the positive "sense of return on investments of self in role performance", safety as the ability to show one's self "without fear or negative consequences to self-image, status or career", and availability as the "sense of possessing the physical, emotional and psychological resources necessary" for the completion of the work. All these psychological conditions show a positive connection with employee engagement.

Kahn (1990) has reported that job involvement, work role fit and co-worker relations were positive indicators of meaningfulness. Rewarding co-workers and supportive supervisor relations enhance safety and self-consciousness; resource availability and outside activities were positive signs of psychological availability. Kang (2014) developed his conceptual employee engagement model using social exchange theory. According to the Kang employee engagement model, psychological capital and perceived service climate influence the organization's engagement level. He further explained that the level of employee engagement within the organization influences their level of satisfaction, organizational citizenship behaviour and turnover intention. Employees' levels of satisfaction also influence the organizational citizenship behaviour and turnover intention of the employees (Kang, 2014).

Empirical Review

Nwoko and Emerole (2017) research examined the effect of employee participation in decision-making on organizational performance: a study of national root crops research institutes Umudike (2012-2016). The study focused on the effect of employees' participation in decision-making on organizational performance concerning National Root Crops Research Institutes Umudike. Specifically, the study sought to ascertain the impact of employees' participation in decision-making on work commitment and examine the effect of employees' participation in decision-making on the productivity of NRCRI Umudike. The study adopted a survey research design, using primary and secondary data. The population of the study consists of all the

institution's employees. Logistic Regression analysis and Pearson Product Moment Correlation were used to run the analysis through SPSS version 20. The major findings revealed a positive relationship between employees' participation in decision-making and the work commitment of the employees in the institution. Employee participation in decision-making has a low positive effect on the institution's productivity, with a correlation coefficient of (r = 0.228). The study concluded that employees' participation in decision-making positively affects organizational performance and recommends that National Root Crops Research Institutes Umudike's management adopt the adept participatory approach in administration/decision-making to encourage employees' affirmative commitment to organizational goals and objectives.

Nachiket (2014) study investigated the existing level of worker participation in management decision-making within the Indian work environment. The study involved a survey in which a total of 217 non-management employees drawn from two work organizations in Uttar Pradesh (Flour Mills and Sugar Mills) were used as subjects. Interview schedules and in-depth interviews were the main research techniques adopted for data collection. In contrast, percentage distribution and chi-square statistical techniques were used to analyze the data collected for the study. Results show that employees in both organizations are highly interested in participating in their respective workplaces' decision-making processes. However, the actual level of involvement in management decision-making demonstrated by the employees was relatively low. There is a significant relationship between education and employees' involvement in decision-making at Flour Mills. In Sugar Mills, a significant relationship exists between age and employees' involvement in decision-making and between the frequency of employees' consultation and organizational commitment. The study reveals a growing desire of non-management employees in the Indian work environment to exercise greater involvement in the decision-making process of their enterprises.

Owolabi and Abdul-Hameed (2011) research examined the relationship between employee involvement in decision-making and firms' performance in the manufacturing sector in Nigeria. Data on employee involvement in decision-making and performance variables were generated through questionnaires administered to 670 manufacturing firms. Responses from the survey were statistically analyzed using descriptive statistics, product-moment correlation, regression analysis and Z-test (approximated with the independent samples t-test). The results of the study indicate a statistically significant relationship between employee involvement in decision-making and firms' performance, as well as reveal a significant difference between the performance of firms whose employee involvement in decision-making is deep and the performance of firms whose employee involvement in decision-making is shallow. The findings also reveal the involvement of participating firms in employee involvement in decision-making. The implications of the study include the need for manufacturing firms to demonstrate a high level of commitment to employee involvement in decision-making for performance enhancement.

In this study, the researcher presented and discussed many ideas about employee involvement and participation in Multinational firms in Akwa Ibom State. Several authors have propounded this study in different study areas. However, most of them were conducted in developed countries. Unfortunately, there are limited studies in developing countries that attempted employee involvement and engagement in organizational effectiveness; there is no such study that has been made on employee involvement and engagement in organizational effectiveness in Multinational Firms in South-South, Nigeria, so the researcher attempted to determine the effect of participation on job satisfaction, ascertain the effect of role congruency on return, ascertain the effect of human capacity development on the cultureof Selected Multinational Firms in South-South, Nigeria.

METHODOLOGY

The study adopted a cross-sectional research design. This design allows the researcher to compare many different variables simultaneously from different study areas. The researcher adopted a primary data source to collect information from the respondents. The study consists of all the workers in the selected manufacturing firms in South-South Nigeria. The study targeted eighty thousand five hundred and four (8504) respondents from the selected study areas. The sample size of the study was 382**.** The study adopted a simple random sampling technique. This sampling technique gave every respondent in the study area an equal chance to participate. The methods used in this study to gather data was a set of questionnaires with a rating scale of 5-point Likert such as 5 (SA), 4 (A), 3 (UN), 2 (SD), and 1 (D).

Validity is based on the view that a particular instrument measures what it is meant to or has a purpose to measure. A regression model was employed to test the study's relationships between dependent and independent variables.

RESULTS AND DISSCUSSION

Table 1: Determine the effect of participation on job satisfaction of Selected Multinational Firms in South-South, Nigeria.

Statement	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	SD
Employee involvement enhances job satisfaction	177	101	12	41	27	1434	4.0	.987
Employee contribution improves job satisfaction	212	89	11	32	14	1527	4.3	.884
Employee responsibility enhances job satisfaction	235	72	-	23	28	1537	4.3	.879
Professional and personal growth boost job satisfaction	252	74	5	11	16	1609	4.5	.784
Employee rewards and recognition enhance job satisfaction	167	112	24	27	28	1437	4.0	.1.25
Dimensions of Dependent Variables								
Salary and welfare enhance participation	156	121	7	40	34	1399	3.9	1.35
Leader behaviour increases participation	198	102	11	33	14	1511	4.2	.908
Personal growth improves participation	125	172	18	23	20	1433	4.0	1.08
Interpersonal relationships enhance participation	202	87	15	25	29	1482	4.1	1.11
Job competency boosts participation	112	167	24	27	28	1382	3.9	1.36

Source: Field Survey, 2023

The result in Table 1 reveals that the decision rule means a score of $\bar{x}$ 3.00 was used to decide on all five (5) statements to determine the dependent and independent dimensions of participation in job satisfaction of Selected Multinational Firms in South-South Nigeria. The majority of the respondents with the highest means of 4.5, 4.3,4.3, 4.2, 4.1, 4.0 and 4.0 strongly agreed that professional and personal growth boosts job satisfaction, employee contribution improves job satisfaction, employee responsibility enhances job satisfaction, leader behaviour increases participation, personal growth improves participation, interpersonal relationships enhance participation, employee involvement enhance job satisfaction and employee rewards and recognition enhance job satisfaction.

Table 2: Ascertain the effect of role congruence on returns of Selected Multinational Firms in South-South Nigeria.

Statement	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	SD
Real improves return on investment	156	121	7	40	34	1399	3.9	1.35
Authentic enhanced return on investment	198	102	11	33	14	1511	4.2	.908
Genuine improved return on investment	125	172	18	23	20	1433	4.0	1.08
Trustworthy improves return on investment	202	87	15	25	29	1482	4.1	1.11
Interest improves role congruence	109	170	24	27	28	1379	3.9	1.36
Dividends enhance role congruence	128	172	18	20	20	1442	4.0	1.08
Capital gain improves role congruence	202	87	15	25	29	1482	4.1	1.11

Source: Field Survey, 2023

The result in Table 2 reveals that the decision rule means a score of $\bar{x}$3.00 was used to make decisions on all five (5) statements to determine the dependent and independent dimensions of role congruence on returns of Selected Multinational Firms in South-South Nigeria. Most respondents with the highest mean scores of 4.2, 4.1, 4.1, 4.0 and 4.0 strongly agreed that authenticity enhances return on investment, trustworthiness improves return on investment, capital gain improves role congruence, dividends enhance role congruence and genuine improves return on investment.

Ho_1: There is no significant effect of participation on job satisfaction of Selected Multinational Firms in South-South, Nigeria.

Table 3: Regression analysis on participation in job satisfaction

Variable	Parameters	Coefficient	Std error	t – value	Sig
Constant	β_0	0.058	0.057	1.017	.000
Participation (X_1)	β_1	0.082	0.072	1.139**	.015
R-Square		0.690			
Adjusted R – Square		0.546			
F – statistics		7.125***			

Source: Field Data, 2023

The table above shows the coefficients of participation in job satisfaction**.** The coefficient of multiple determination (R^2) was 0.690, which implies that changes in the independent variable explained 69.0% of the variations in dependent variables. In comparison, 31.0% were unexplained by the stochastic variable, indicating the goodness of fit of the regression model adopted in this study, which is statistically significant at a 1% probability level. The participation coefficient was statistically significant and positively related to job satisfaction at a 5 per cent level (1.139**). With p-value =.015<.05% significance level. This implies a significant effect of participation on job satisfaction of Selected Multinational Firms in South-South,

Nigeria.The majority of the respondents strongly agreed that professional and personal growth boost job satisfaction, employee contribution improves job satisfaction, employee responsibility enhances job satisfaction, leader behaviour increases participation, personal growth improves participation, interpersonal relationships enhance participation, employee involvement enhances job satisfaction and employee rewards and recognition enhance job satisfaction.

Ho_2: There is no significant effect of role congruence on the return of Selected Multinational Firms in South-South Nigeria.

Table 4: Regression analysis on role congruence on returns

Variable	Parameters	Coefficient	Std error	t – value	Sig
Constant	β_0	0.055	0.082	0.670	.005
Role Congruence (X_1)	β_1	0.105	0.057	1.842**	.009
R-Square		0.609			
Adjusted R – Square		0.530			
F – statistics		7.788***			

Source: Field Data, 2023

Table above shows the coefficients of role congruence on returns**.** The coefficient of multiple determination (R^2) was 0.609, which implies that changes in the independent variable explained 60.9% of the variations in dependent variables. In comparison, 29.1% were unexplained by the stochastic variable, indicating the goodness of fit of the regression model adopted in this study, which is statistically significant at a 1% probability level. The coefficient of role congruence was statistically significant and positively related to returns at a 5 per cent level (1.842**). With p-value=.009< .05% significance level. This implies a significant effect of role congruence on returns of Selected Multinational Firms in South-South Nigeria. Most respondents strongly agreed that authenticity enhances return on investment, trustworthiness improves return on investment, capital gains improve role congruence, dividends enhance role congruence, and genuinely improve return on investment.

CONCLUSION AND POLICY IMPLICATIONS

Employee involvement and engagement drive commitment. When employees are allowed to be involved in matters that concern them, they begin to see themselves as important members of the firm and try as much to ensure that such decisions succeed. In doing this, they consciously or unconsciously become more committed to realizing the organization's goals and objectives. Thus, the need for organizations to achieve a high level of employee participation is a call for introducing and implementing an organization's employee involvement programme. Thus, participation significantly affects the job satisfaction of Selected Multinational Firms in South-South Nigeria. Employees are expected to know and understand their roles in the organization; they should be able to take full responsibility for their behaviours, behave professionally, treat co-workers respectfully, or be accountable for their work. Moreover, all these can be achieved through effective communication and total adherence to the rules and regulations of the organization. If implemented and carried out, role congruence and employee responsibility will significantly affect the return of Selected Multinational Firms in South-South Nigeria.

Firms should develop policies encouraging employee participation in decision-making processes, particularly those directly affecting their roles and responsibilities. Involving employees in decisions fosters a sense of ownership and commitment. Firms under the study should establish policies for formal recognition and rewards programs that acknowledge and celebrate employee achievements. Recognizing employees' contributions enhances job satisfaction and reinforces a positive work culture.
Firms should implement policies that provide opportunities for continuous learning and professional development. This can include training programs, mentorship initiatives, and educational support to help employees enhance their skills and advance in their careers.

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EFFECT OF ORGANIZATIONAL INTEGRITY ON EMPLOYEE PRODUCTIVITY IN SELECTED FEDERAL PARASTATALS IN ABIA STATE, NIGERIA

Amos, Aniedi S., Okafor, Chinyere S. and Bern-Madu, Loveth C.
Michael Okpara University of Agriculture, Umudike

ABSTRACT
The study focused on the effect of organizational integrity on employee productivity in selected Federal Parastatals in Abia State, Nigeria. The study sought to determine the influence of professional integrity on employees' job satisfaction in selected Federal Parastatals in Abia State. The study adopted a survey research design. Primary and secondary data were used for the study. A stratified sampling technique was adopted. The total population of the study is 490, which consists of the National Identity Management Commission (NIMC), the National Population Commission (NPC) and the Nigeria Immigration Service (NIS). The study employed a Z-test model to test the hypotheses of the study. The result from the Z-test showed that the effect of professional integrity on employees' job satisfaction is positive and therefore recommends that management should work towards controlling the challenges that hinder the effectiveness of organizational integrity as this will improve self-discipline at work, promote good reputation, resistance to temptation and honesty among the employees in selected Federal Parastatals in Abia State. The implication of the study showed that organizations that are found to have strong organizational integrity are likely to enjoy a positive reputation in the industry. This can lead to increased trust from customers, investors, and other stakeholders.
Keywords: Organizational Integrity, Employee Productivity, Professional Integrity, NIMC, NPC and NIS.

INTRODUCTION
Integrity is vital to the functioning of private as well as public organizations. If the integrity of an employee or manager is in question, it may have paralyzing consequences for them and the organization. Integrity is important for-profit and non-profit organizations (Kaptein & Wempe, 2002). Integrity is about not doing the wrong thing, not necessarily doing ethical things, but also about doing the right thing and being perceived as positive, active and proactive. Integrity is a moral foundation for effective leadership, and leaders with integrity are honest even when the situation is self-damaging (Russell & Stone, 2000). Integrity refers to an analytical decision-making process based on envisaged organizational principles and values that simultaneously may function as an ideal and a constraint, and a person of integrity has an awareness resulting in an attitude to follow the spirit of the rules, adhering to deeply held ethical principles and values and making right decisions. Integrity is an attitude that surrenders to ethical commitment, the gateway to operating from one's deepest purpose in concert with a larger whole (Senge *et al.,* 2004).
In order to improve or safeguard the integrity of their organization, many boards have developed all sorts of policies, ranging from codes of conduct and whistle-blowing procedures to job rotation and screening procedures for applicants. However, of all the measures that can be taken to prevent integrity violations, the behaviour of management remains the most important. Several scholars and practitioners argue that leadership is the key variable influencing the ethics and integrity of employees (Zhu *et al.*, 2004). High-integrity organizations are collaborative, constructive, innovative, and transparent, with high employee morale, valued customer loyalty and strong partnerships. They build teams and create value. Studies have shown that corporations with a culture of integrity tend to have governance systems with higher external ratings and higher quality of earnings. They tend to be good places to work, competitive in their markets, and provide higher, more predictable returns to investors. However, the term integrity often varies in scope and perspective across professional disciplines and even among scholars within the same academic field (De Bakker, 2007).
Even so, the government of Nigeria, through its transformation agenda, is making frantic efforts to reposition its various institutions to achieve its desired objective of providing quality services for national development. The institutions are highly priced as being strategic to the ultimate goal of human capital development through training and other services they offer. With this thinking in focus, the employees of these institutions are central to repositioning the institutions for optimal performance (Lyn, 2004). Behavioural trends that symptomize unethical behaviour and poor integrity among employees in these institutions do not promptly attend to work tasks, making it increasingly difficult to attain goals. What can be deduced is that an aggregation of such counterwork productive behaviour is likely to impinge on

performance; therefore, the need to investigate the effect of organizational integrity on employee productivity of selected Federal Parastatals in Abia State becomes imperative (Currall *et al*., 2005).

Managers and leaders in various institutions unequivocally agree that this century demands more efficiency and productivity than at any other time in history. Private and public businesses are striving to increase their performance. Managers have been grappling with many challenges to succeed in putting their organizations ahead of competitors. Scholars, researchers, and consultants have been contributing their part to help managers' management, showing the best ways they think are useful to managers. Therefore, organizational integrity has become a hot topic in recent years. However, many researchers have investigated the relationship between integrity and ethics in organizations and its effect on workers. However, this study focused on the effect of organizational integrity on employee productivity (Lasthuizen, 2008).

On the other hand, Abia State Nigeria institutions often need to be more concerned about the integrity and ethics of the organization and how it affects employee productivity. Hence, every profession has a complex body of knowledge, a standard of admission, and a need for public confidence that distinguishes them from their counterparts. Besides these professional standards, there are still traces of moral decadence, quick-success syndrome, over-concentration to paper worth not minding repute, erosion of value system, and, to cap it up, the syndrome of cognitive melodrama (Senge *et al.,* 2004). Majorly integrity is deemed a vital component of the functioning of organizations. The absence of integrity leads to misconduct, fraud, and corruption, resulting in enormous financial losses, severe reputational damage, bankruptcy and other social vices in the workplace. Therefore, for employees in selected institutions to perform according to expectations, consideration must be made concerning workplace integrity. This study therefore, examines the effect of professional integrity on employees' job satisfaction (Zhu *et al.*, 2004).

REVIEW OF LITERATURE

Integrity

The word integrity derives from the Latin "integrate", which means complete or flawless, perfect, without a visor, wholeness, completeness, conscientious coherence, or committed responsibility. The point is what is in the hearts of the same with what we think, say and do (Bertens, 2004). So, integrity is a consistent attitude and behaviour to uphold work and professional ethics. Integration requires the temptation or opportunity to commit misconduct. However, integration is the ability to be patient when life does not go smoothly. Integration is a test stand that requires predictable behaviour. Integration is a force that remains firm even though no one notices. Integration remains firm on certain values despite being perceived as more popular to dump him. Integration means living with confidence rather than with what they like. Integration is the foundation of life. If the motivation is good, then the good life, and vice versa. Integration was formed through customs (Bertens, 2004).

Hernon and Whitman (2009) state that integrity is a concept of consistency of actions, values, methods, measures, principles, expectations and outcomes that connotes a deep commitment to doing the right thing for the right reason, regardless of the circumstances. It can also be referred to as the consistency between one's values, words and actions. Integrity is a belief among employees that the organization leaves its value and that espoused behavioural norms are adhered to, resulting in trust and a sense of integrity. Integrity describes the behaviour involving employees and the success of fair dealings, honesty and reliability in the workplace. According to Currall *et al*. (2005), integrity is knowledge, awareness, understanding and holding fast to the values that are consistently accompanied by a full commitment to those values in every word and action to achieve personal and organizational excellence. Integrity is the utmost compliance with the values of the local community. By that, Individuals are said to have high integrity when their actions align with their pure values. Also, trust is fundamental in teamwork at the workplace, and integrity builds trust. Integrity has to be role-modelled not just by senior leaders but also by managers throughout the organization. Accordingly, integrity and trust are two important characteristics of positively nurtured, developed and embedded human capital, which can be great value-added talent and commodities while aligning with the organization's mission (Petrick& Quin, 2003).

Becker (2008) defines integrity as commitment to a morally justifiable set of principles and values in such a way that it is assumed as a moral justification based on the reality of a universal truth. In the same link, Huberts *et al*. (2007) define integrity as the quality of acting according to socially accepted moral values, norms, and rules. Integrity is about not doing the wrong thing, not necessarily doing ethical things, but also about doing the right thing and being perceived as positive, active and proactive. Integrity is a moral foundation for effective leadership, and leaders with integrity are honest even when the situation is self-damaging (Russell & Stone, 2000). Integrity refers to an analytical decision-making process based on

envisaged organizational principles and values that simultaneously may function as an ideal and a constraint. A person of integrity has an awareness resulting in an attitude to follow the spirit of the rules, adhering to deeply held ethical principles and values and making the right decisions. Integrity is an attitude that surrenders to ethical commitment, the gateway to operating from one's deepest purpose in concert with a larger whole (Senge *et al*., 2004).

Lasthuizen (2008) defines integrity as the quality of individual behaviour by the organizational values, norms, rules and obligations and its organizational environment. Personal moral integrity is central to individual integrity, that is, an individual who accepts full responsibility for his actions and any negative consequence. Thomas *et al.* (2004) explain the commitment to integrity, where the floor is the legal baseline and above is the level of ethics that the organizational management adopts. Thus, the components of process integrity, according to Petrick and Quin (2003), are moral awareness, moral deliberation, moral character and the practices and actions carried out by personal and collective agents. This process incorporates characteristics of integrity: conscientiousness and discernment, resolution and accountability, commitment and readiness, coherence and authenticity in moral conduct.

Organizational Integrity

The concept of organizational integrity originates in Weber, who argued that economic development was closely linked to the emergence of formal bureaucracies and management routines or universal rules and regulations, which provide the secure and predictable basis for individual interests and capabilities to be channelled to collective projects. The concept of organizational integrity includes the autonomy of capacity, competence, and credibility of local political institutions and the efficiency of administrative bureaucracy of either local public institutions or private organizations. The purpose of an organization and the values it embodies cannot merely be spelt out but must be enacted. It is the leader's responsibility to ensure this happens, as the purpose serves as a guide to organizational action, and the people must be united and work toward the same goals. This unity of the people is a part of organizational integrity (Lasthuizen, 2008).

However, organizational or institutional integrity is defined as the fidelity to self-defined values and principles. It emphasizes staying the same, keeping the familiarity in the organization and protecting values. Organizational integrity is related to both the technical and the institutional; it includes maintaining the social system in the organization and is crucial for the survival of the organization. Solomon (2009) avers organizational integrity is the integrity of individuals working inside and outside in and on behalf of the organization, and it is both a standard of personal moral excellence and a relational value. Organizational integrity is a social virtue emphasized by relationships and connectedness between persons and stakeholders of an organization, all of them behaving and acting with integrity and morally reasonable rational values (Becker, 2008). Organizational integrity creates standards to provide the cultural cohesion for professional responsibility and competence in the right attitude to approach organizational problems and dilemmas (Karssing, 2000).

Organizational integrity is defined as organizational conduct compliant with the moral values, standards, norms and rules accepted by the organization's members and stakeholders, but also as the commitment to an equal distribution of public services to all citizens (Kolthoff, 2010). As a social phenomenon, organizational integrity involves consistency between principles and action, embedding adherence to socially accepted principles and consensually validated with a comprehension of what is fair and just. Moreover, organizational integrity is an attribute of a dynamic organizational self, making autonomy possible, as Kraatz and Block (2008) suggested. Individuals and organizations displaying commitment to values commonly shared by commitments that sustain trustworthiness can generate personal and organizational integrity attitudes. An attitude of integrity framed by shared commitments can unfold to extend benefits to all the stakeholders in any organizational setting.Organizational integrity is embodied in an organizational ethical culture of open communication, interaction, diversity and dialogue within a common moral framework of principles and ethical values. Organizational integrity can be used to justify utilitarian-instrumental ethical discourse, although it does not necessarily foster organizational ethics standards. Emphasis on the intrinsic value of organizational integrity matching actual performance and avoiding potential damages of utilitarian-instrumental misuse allows organizations to develop a genuinely caring environment for all the internal and external stakeholders. Cameron et al. (2004) reported integrity as one of the virtues strongly related to firm performance and preventing unethical and dysfunctional organizational behaviours and the associated negative effects.

Organizational integrity, aimed at minimizing organizational corruption, refers to integrating an organization's operational systems, corruption control strategies and ethical standards. Organizational integrity has been advocated by professionals involved in human resources development and individual

and group work processes. According to Lyn (2004), organizational integrity is based on self-governance by guiding principles more than normative - compliance to avoid legal sanctions. The maintenance of any organizational integrity system faces a representational framework of means and requirements. One of these requirements is to have reliable agents to acquire, maintain and reason the dynamics of changing organizations. This notion of organizational integrity regulates the organizational dynamics of any system.
Nevertheless, organizational integrity systems are policy and operational frameworks that integrate an organization's anti-corruption strategies. They usually comprise standard elements, including risk assessment, audit and investigation capacity, reporting, education and training, organizational controls and policies, administrative structures, leadership and communication (Plibersek & Mills, 2009). When the identity is not strong, the organizational integrity may be weak. Therefore, the organization needs to be clearer about what it stands for in its current operations and functions. However, an institutional integrity system formed by a set of integrity policies and operational procedures can only stop workplace corruption despite the anticorruption strategies designed and implemented by this framework. Failure to implement an organizational integrity system may be a factor in workplace corruption.

Theoretical Framework

Consequentialism Theory

Consequentialism Theory wasdeveloped by Henry Sidgwick (1907). Consequentialism, as its name suggests, is simply the view that normative properties depend only on consequences. This historically important and still popular theory embodies the basic intuition that what is best or right is whatever makes the world best in the future because we cannot change the past, so worrying about the past is no more useful than crying over spilt milk. This general approach can be applied at different levels to different normative properties. However, the most prominent example is probably consequentialism about the moral rightness of acts, which holds that whether an act is morally right depends only on the consequences of that act or of something related to that act, such as the motive behind the act or a general rule requiring acts of the same kind.
However, consequentialism is the view that morality is *a*bout producing the right overall consequences. Here, the phrase "overall consequences" of an action means everything the action brings about, including the action itself. Consequentialism is controversial. Various non-consequentialist views are that morality is all about doing one's duty, respecting rights, obeying nature, obeying God, obeying one's own heart, actualizing one's potential, being reasonable, respecting all people, or not interfering with others no matter the consequences. This can apply to various profit and non-profit organizations (Greene, 2013).

Empirical Review

Huberts *et al.* (2007) investigated a study on the impact of three leadership styles on integrity violations committed by police officers. The purpose of the paper was to explore the connection between three aspects of leadership – role modelling, strictness and openness and nine types of integrity violations within the Dutch police force. This paper collected data using a questionnaire from five regional police organizations in The Netherlands (2,130 questionnaires to regular police officers, with a response rate of 51 per cent). Respondents were requested to describe their direct supervisor's leadership qualities and the frequency of integrity violations in their unit. Multivariate analysis techniques were employed to test the relation between the three leadership styles and the nine types of integrity violations. The paper found that role modelling, strictness and openness of leaders enhance the behaviour of police officers. However, the impact of the variables on the different types of integrity violations varies. Role modelling is especially significant in limiting unethical conduct in interpersonal relationships. Employees appear to copy the leader's integrity standards in their daily interactions with one another. Strictness is also important but appears to be particularly effective in controlling fraud, corruption and the misuse of resources. The impact of openness is less evident. The study results were significant for further developing theories on ethics and leadership. Future research should combine different sources and methods to test the findings further. The results in this paper have implications for integrity policies and leadership training. A multifaceted leadership strategy will be most effective in safeguarding and improving the integrity of (police) organizations. The paper showed that leadership is the most frequently cited organizational factor in discussions about safeguarding ethics and integrity. However, empirical data regarding the extent to which different aspects of leadership individually contribute to different kinds of integrity violations are lacking.
Sergio (2013) conducted a study on achieving business sustainability: the role of integrity. Business sustainability is developing into a fundamental matter for practitioners and academics. The scope of sustainability has broadened from environmental matters only to include other topics such as good corporate citizenship, business relationships and value creation, all of them looking at a wide community of stakeholders and not only with a focus on a limited number of shareholders. On the topic of

relationships with stakeholders, this paper found that an interaction enabler such as personal relationships with a stakeholder group member helps companies establish beneficial projects for both parties, which later turn into the convergence point where the parties can discuss and resolve other relevant issues. Stakeholder groups that shared a project with the company felt that more value was created and were more supportive of the company's activities.This paper finds that non-economic value is as important as economic value regarding value creation and network integrity. Network integrity is built on consistency, trust and pride. While consistency and trust are well-known dimensions of business relationships, pride has yet to be studied. As pride needs no enforcement, when achieved, it strengthens the links of the network and fosters business sustainability at little or no cost. This paper concluded that relationship integrity increases business sustainability. Integrity strengthens the links between actors in a network, reduces costs to build and maintain relationships, and reduces motivation for opportunistic behaviour. Integrity positively affects the parties' perception of value creation and how this is shared within the network.
This research opens new avenues for businesses to become sustainable and for academics to study business interaction in times of sustainability search.After a thorough and careful review of a series of related literature, it was observed that scholars have done similar work on organizational integrity as it affects other organizational variables, but none of these studies determine the influence of professional integrity on employees' job satisfaction,establish the relationship between organizational integrity and employees' performance, ascertain the impact of moral integrity on employees' efficiency andexamine the challenges of organizational integrity in selected institutions in Abia State, Nigeria. Thus, this study fills the gap.

METHODOLOGY

A survey research design was adopted to obtain accurate data based on the respondents' opinions. Primary and secondary data were used for the study. The population of this study is four hundred and ninety (490) obtained from the three selected Federal Parastatals in Abia State, Nigeria. Therefore, 220 staff members from the three selected public institutions were used for the study. A stratified sampling method was adopted, giving the staff an equal chance of being selected. The researcher questionnaire was fashioned along the rating scale model with five points Likert scale from "Strongly Agreed" to "Strongly Disagreed" in the numeric format, 5 represents "Strongly Agreed", 4 represents "Agreed", 3 implies "Undecided", 2 means "Disagreed" and 1 connotes "Strongly Disagree". The z-test model was used to analyze the dependent and independent variables of the study.A total of 220 questionnaires were administered to NIMC, NPC and NIS; 32 questionnaires were lost with a percentage ratio of 14.6%, while the questionnaire retrieved was 188 with a percentage ratio of 85.4%, which formed the basis of the study.

Data Presentation/Results

Table 1: Determine the influence of professional integrity on employees' job satisfaction in selected Federal Parastatals in Abia State.

RESPONSES	SA	A	UN	D	SD	Total	Mean
Honesty improves good relationships with colleagues	176	12	-	-	-	928	4.9
Transparency enhances learning and career development	135	24	4	15	10	823	4.4
Accountability improves the company's financial stability	168	20	-	-	-	920	4.9
Being trustworthy and reliable boosts employees' job security	122	19	12	13	22	770	4.1
Sound judgment improves good work-life balance	143	28	4	5	8	857	4.6

Source: Field Survey, 2023

Decision Rule

If the Mean < 3.5, the extent is not high, or the respondents do not agree

If the Mean ≥ 3.5, the extent is high, or the respondents agree

The table above shows the influence of professional integrity on employees' job satisfaction in selected Federal Parastatals in Abia State. The majority of the respondents with the highest mean score strongly agree that honesty improves good relationships with colleagues (x=4.9), accountability improves the company's financial stability (x=4.9), Sound judgment improves good work-life balance (x=4.6),

transparency enhances learning and career development (x=4.4) and Trustworthy and being reliable boost employees' job security (x=4.1). Therefore, since the mean of all the responses is≥ 3.5, professional integrity influences employees' job satisfaction in selected Federal Parastatals in Abia State.

Testing of Hypotheses

$H0_1$: Professional integrity does not significantly affect employees' job satisfaction in selected Federal Parastatals in Abia State.

Table 2: Z-Test on Professional integrity on employees' job satisfaction (One sample Z test)

Z- statistic	P-value	Sample Mean
1.87178	.03587	.3478

Source: Field Data, 2023

The result from the Z-test showed the effect of Professional integrity on employees' job satisfaction. The value of the Z-statistic was 1.87178, which is less than 2. The value of 2 indicates "agree" to the research objective; the sample mean is .3478, which is larger than the population size, with a p-value of .03587 < .05 significance level. Therefore, reject the null hypothesis and accept the alternate. This implies thatProfessional integrity significantly affects employees' job satisfaction in selected Federal Parastatals in Abia State. The majority of respondents strongly agree that honesty improves good relationships with colleagues, accountability improves the company's financial stability, sound judgment improves good work-life balance, transparency enhances learning and career development, and Trustworthiness and reliability boost employees' job security. Therefore, professional integrity influences employees' job satisfaction in selected Federal Parastatals in Abia State.

CONCLUSION AND RECOMMENDATIONS

The study examined the effect of organizational integrity on employee productivity in selected Federal Parastatals in Abia State, Nigeria. Organizations and individuals with integrity build trust in their relations with others; they become valued as friends, colleagues, mentors, and supervisors and never want to discharge their duties. They are respected and counted on to do what is right and upright. They can balance respect and responsibility and share their values with others. The study further revealed that Organizations should take full responsibility for ensuring good practical guidelines that suggest leading through ethical role modelling, an exhibition of sound leadership qualities, developing performance criteria that reward ethical behaviour, facilitating fair and ethical solutions to problems and conflict, monitoring fraud and corruption through internal and external audit systems and promoting a code of ethical conduct as these can drive management practices. Also, by strengthening these factors, work engagement is promoted amongst employees because of the trust they have in their leaders for considering their interests and for behaving fairly and ethically when decisions are made in a changing work environment. Managers, scholars, and professional associations should foster organizational integrity, promoting ethical codes and building ethical workplaces to develop beneficial cooperation between persons and organizations. Also, the leadership team must set the tone for integrity within the organization. Leaders should consistently demonstrate honesty, ethics, and transparency in their actions and decision-making.

Policy Implications

Organizations with strong organizational integrity are likely to enjoy a positive reputation in the industry. This can lead to increased trust from customers, investors, and other stakeholders. Commitment to integrity can be a significant differential or in a competitive marketplace. Customers and partners may prefer to do business with organizations known for their ethical practices.

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IMPACT OF WORKFORCE ENGAGEMENT ON PERFORMANCE OF MANUFACTURING FIRMS IN ABIA STATE

Nnadi-Nicholas, Eucharia O., Ikoro, Uzoma E., Emereole, Ibemelam D. and Ollawa, Charles C.
Michael Okpara University of Agriculture, UmudikeAbia State
Corresponding author: emereoledaniel@gmail.com

ABSTRACT
This study examined the nexus between workforce engagement and the performance of manufacturing firms. It sought to determine the critical role of reward and recognition on performance and how employee involvement and participation can enhance performance. This research adopted a survey design. Data was collected from 139 respondents using questionnaires and analyzed using a regression model. The study found that reward and recognition significantly impact the performance of Selected Manufacturing Firms in Abia State p-value = 0.005 < 0.05% significance level. The study concluded that involvement and participation significantly affect the effectiveness of Selected Manufacturing Firms in Abia State p-value = 0.000 < 0.05% significance level, and recommends that salaries and recognition should be paid as agreed upon by the employer and employee in line with the position and condition of services of the employee towards improving organizational performance.
Keywords: Workforce Engagement, Involvement, Participation, Reward and Recognition, and Performance**.**

INTRODUCTION

Workforce engagement is one of the important issues within organizations that aim to gain a competitive edge in the global market. Normally, it is in a firm's best interest to put effort into engaging and avoid losing their talented employees and not recruiting anyone (Branham, 2005). Organizations worldwide are giving more attention and importance to this issue as they know that high-level employee engagement affects the performance of the employees and the organization (Chung & Sue-Ting, 2009). Company benefits, employee attitude, and job performance are important in organizations engaging their workforce. In addition, offering workforce benefits such as reasonable flexibility with work-life balance, performance reviews, and performance-based salary increases along with traditional benefits such as paid holidays and traveling allowances aid firms in managing their workforce.

Engagement of the workforce can be a vital source of competitive advantage for any organization since workers are the active factors who work to bring about certain ends in organizations. However, many organizations face the difficult task of engaging their workforce and ensuring that their workers remain loyal and committed to their organizations. Workers' engagement primarily concerns why employees prefer to remain with their current organizations (Ejiofor & Mbachu, 2001). Globally, firms are now recognizing the value of investing in their workforce more than ever. However, firms understand that to stay on top in the global economy, they need to strategize on engaging their workforce towards gaining competitive advantage.Workforce engagement is one of the key issues within competitive organizations. Thus, workers are the most valuable assets in any organization. Normally, it is in a company's best interest to engage its talented workers rather than recruit new ones (Branham, 2005).

Uche-Deborah *et al.* (2022) posit that an organization should determine what to delegate, choose the right person to delegate the task to, and clearly define the employee's responsibility and authority as it relates to the delegated task to achieve a desired result. Organizations rely on their workforce's expertise, knowledge, skills, capital resources, and capacity development to compete favorably and gain a competitive advantage in the international market. However, engagement of highly skilled employees has become difficult for managers, as these categories of employees are attracted by more than one organization at a time with various kinds of incentives (Powell & Lubitsh, 2007). This behooves management to create an enabling and sustainable critical culture and strategies to work out engagement systems and structures for workers in these contemporary organizations. In order to accomplish an organization's goals and objectives, the engagement of employees has proven to be a very significant factor. For any organization to gain the desired competitive advantage, they need to be able to engage their workers first (Vellani, 2012). Most researchers have found that employees will remain and work to ensure the achievement of organizational goals, which is successful only when appropriate employee engagement is adopted and implemented.

Therefore, workforce engagement may increase organizational performance and provide opportunities that have fascinated the organization(Griffeth & Hom, 2001).

Interestingly, while today's organizations differ, the engagement challenge is growing. It is quite sad that businesses today need to adopt some of the strategies used in the past to ensure that more workers are engaged. Manufacturing firms are not creating an environment that encourages workers to remain loyal to the organization. There is no involvement and participation of workers in the firm's decision-making; workers no longer feel the impact of decisions happening in the firm since they do not participate in such decisions. Managers no longer consider the workload given to an employee; these heavy workloads among employees have reduced their commitment and loyalty and also caused staff absenteeism, lateness, and turnover, which, in most cases, leads to the employee's death (Powell &Lubitsh, 2017).

Furthermore, poor supervision, fringe benefits, contingent rewards, operating procedures, co-workers, working environment, ineffective communication, work experience, age and sex differences, salary, efficiency at work, fringe supervision, and co-worker relations are the most important factors contributing to employee commitment and engagement, which affects market share of the organization. Thus, employees who are not well motivated through fair promotions and justifiable salary differences will be less committed to work. The challenge most managers face today is formulating effective workforce engagement to help retain workers considered critical in attaining organizational goals. Workforce who are highly motivated, committed, and engaged are more likely to stay longer on the job than those who are bored and dejected (Crim & Seijts, 2016). Against this backdrop, this study examined the impact of workforce engagement on the performance of Manufacturing Firms in Abia State. And critically examined the role of reward and recognition on performance and how employee involvement and participation can enhance performance.

REVIEW OF LITERATURE

Workforce Engagement

Schaufeli and Bakker (2002) describe engagement as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. The authors further tested Kahn's model, and their findings supported that the psychological conditions of meaningfulness, safety, and availability are positively linked to engagement. Robinson (2004) defines engagement as one step ahead of commitment. They define workforce engagement as a positive attitude of employees towards their organization and its values, wherein employees are aware of the business context and work to improve job and organizational effectiveness. Another prominent definition of engagement emerged from the contribution of Salanova *et al.* (2010); they coined the term 'job engagement' and defined it as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. Hewitt (2004) conceptualizes engagement as the state in which individuals are emotionally and intellectually committed to the organization or group, as measured by three primary behaviors: Say (Employees speak positively about the organization to others inside and out), Stay (Employees display an intense desire to be a member of the organization) and Strive (Employees exert extra effort and engage in behaviors that contribute to business success)." Engaged employees exhibit these three behaviors: Say, Stay, and Strive. Saks (2006) extended the concept of employee engagement to include two important aspects: job engagement and organization engagement. It is widely believed that his work restored workforce engagement as a serious construct. Fleming and Asplund (2007) of Gallup, in their book titled 'Human Sigma: Managing Employee-Customer Encounter,' define employee engagement as "the ability to capture the heads, hearts, and souls of your employees to instill an intrinsic desire and passion for excellence." They further point out that engaged employees want their organization to succeed because they feel emotionally, socially, and spiritually connected to its mission, vision, and purpose.

Workforce engagement is a measurable degree of an employee's positive or negative emotional attachment to his job, colleagues, and organization, profoundly influencing his willingness to learn and perform at work. Wellins and Concelman (2004) suggest that workforce engagement is the illusive force that motivates employees to achieve higher performance levels. This coveted energy is an amalgam of commitment, loyalty, productivity, and ownership. They added that it includes "feelings and attitudes employees have towards their jobs and their organization.

Participation

It has been argued that participation is vital to improving an organization's job satisfaction. Workers' participation has been proven to be a management solution to increasing workers' satisfaction (Crim, 2006). According to a classic definition, participation is described as involvement. In some views of organizational researchers, there are several dimensions of organization participation. These include

opportunities for employees to achieve their goals, seek ideas among the employees, and assign responsibilities to employees. Employee participation is considered a key element in successfully implementing new management strategies and plays an important role in determining the degree of job satisfaction. This, in turn, increases the commitment of the employee as well as their motivation (Brown, 2001).

Furthermore, participation is a mental and emotional reflection that will lead to fulfilling individual and organizational goals, especially if supported by the organization's climate. Participation is seen as an organizational process in which individuals are involved and have an influence on relevant decisions (that affect them). Therefore, participation is an organizational mechanism, giving employees the right to make decisions and the matching amount of responsibility to feel aware of contributing to organizational performance. With the participation in hand, their motivation increases, which brings about both individual benefits and organizational effectiveness (Sim, 2002). Participation increases employee motivation because the contribution toward the organization's goals is realized. Job satisfaction and successful teamwork with supervisors will increase, as well, because employees are less stressed, there is less conflict, there is more commitment to organizational goals, and, at last, organizational change is better accepted (Brown, 2001).

Participation is a joint consultation between employees and managers that brings them together to address problems and reach decisions as a team (Sims, 2002). In consultative management, employees' involvement is emphasized, requiring employees to understand a recent problem and later decide on its solution. Three concepts arise from this approach - emotional and mental involvement, motivation to contribute to organizational performance, and accepting responsibility. Participation is vital in decision-making, where all organizational levels supply the necessary information. When employees actively participate in the decision-making process, with their individual goals set, they internalize the organization's goals. Regarding employees' goals, our respondents agree that participation is expected to lead to individual commitment. This should be followed by organizational commitment, meaning participation should not be limited (Sims, 2002).

Chidi and Shadare (201) found that several variables determine the relationship between employees' participation in decision-making and organizational climate, including well-organized teamwork and good communication. Management practice kindled a renewed interest in employee involvement issues. This is due to the growing evidence that employee participation increases their effort, which subsequently improves efficiency and productivity, reduces the cost of monitoring employees, and leads to increased commitment. Moreover, a study by Clarke (2001) stated that participation in decision-making is important to employees and, along with job satisfaction and affective organizational commitment, is valued by them. Employees believe they are better off because of participation in decision-making.

METHODOLOGY

This research adopted a survey design. Survey design involves querying the selected population about a certain issue. It allows the researcher to collect information on the actual state of the phenomenon at the time of the study. This study adopted a primary source of data collection through a questionnaire, which was structured in a 5-point Likert scale of strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The study consists of three (3) manufacturing firms in Abia State. Thus, the population of the study was 237. The sample size is 149, derived from the Taro Yamane formula. A total of one hundred and forty-nine (149) questionnaires were distributed to the respondents in the study area. Out of this number, one hundred and thirty-nine (139) were returned, while ten (10) were rejected due to irregularities in the response pattern, which constituted 93.3% of the basis of this study. The researcher used a simple random sampling technique. This sampling technique gave every respondent in the study area an equal chance to participate. The validity test used in this research work was content validity. A regression model was used to test the hypotheses of the study.

RESULTS AND DISCUSSIONS

Table 1: Assess the impact of rewards and recognition on performance of Selected Manufacturing Firms in Abia State.

RESPONSES	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	SD
Wages and salary improves organizational performance	95	18	4	20	2	601	4.3	.910
Pay enhances organizational effectiveness	101	21	7	10	- -	630	4.5	.812
Awards increase organizational productivity	80	32	10	11	6	586	4.2	.927
Paid holidays improve organizational performance	110	29	- -	- -	- -	666	4.8	.712
Appreciations boost employee morale	89	42	8	- -	- -	637	4.6	.801

Source: Field Survey, 2023

The table above shows the impact of rewards and recognition on the performance of Selected Manufacturing Firms in Abia State. The majority of the respondents with the highest mean scores of 4.8, 4.6, 4.5, 4.3, and 4.2 strongly agreed that Paid holidays improve organizational performance, appreciation boosts employee morale, Pay enhances organizational effectiveness, Wages and salary improve organizational performance, and Awards increase organizational productivity.

Table 3: Examine the impact of involvement and participation on the effectiveness of Selected Manufacturing Firms in Abia State.

Statement	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN	SD
Employee-free opinion polls in decision-making enhance employee performance	82	31	8	10	8	592	4.2	. 925
Employee delegation increases organizational growth	115	21	- -	2	- -	663	4.8	.784
Employer responsive to opinions and criticism improve employee performance	99	27	13	- -	- -	619	4.4	.899
Employee inclusiveness affects organizational growth	84	41	8	6	- -	620	4.5	.819
Employee-fair treatment boosts organizational productivity	94	29	- -	10	6	612	4.4	885

Source: Field Survey, 2023

The table above shows the impact of involvement and participation on the effectiveness of Selected Manufacturing Firms in Abia State. The majority of the respondents with the highest mean scores of 4.8, 4.5, 4.4, 4.4, and 4.2 strongly agreed that Employee delegation increases organizational growth, Employee inclusiveness affects organizational growth, Employee fair treatment boosts organizational productivity, employer responsive to opinions and criticism improves employee performance and Employee free opinion poll in decision making enhance employee performance.

Ho_1: Reward and recognition do not significantly impact the performance of Selected Manufacturing Firms in Abia State.

Table 3: Regression model on reward and recognition of performance

Variable	Parameters	Coefficient	Std error	t – value
Constant	β_0	0.017	0.028	0.607***
Reward and recognition (X_1)	β_1	0.042	0.068	0.618***
R-Square		0.595		
Adjusted R – Square		0.516		
F – statistics		7.470***		

Source: Field Data, 2023

The table above shows the impact of reward and recognition on performance**.** The result of the coefficient of multiple determination (R^2) was 0.595, which implies that changes in the independent variables explained 59.5% of the variations in dependents. In comparison, 40.5% were unexplained by the stochastic variable, indicating the goodness of fit of the regression model adopted in this study, which is statistically significant at a 1% probability level. The coefficient of reward and recognition was statistically significant and positively related to performance at a 5 percent level (2.917***). This implies that a unit increase in reward and recognition leads to a corresponding increase in performance. This implies that reward and recognition significantly impact the performance of Selected Manufacturing Firms in Abia State.

Ho_2: Involvement and participation do not significantly impact the effectiveness of Selected Manufacturing Firms in Abia State.

Table 4: Regression Model on involvement and participation in effectiveness

Variable	Parameters	Coefficient	Std error	t – value
Constant	β_0	0.061	0.047	1.298
Involvement and participation (X_1)	β_1	0.242	0.097	2.495**
R-Square		0.678		
Adjusted R – Square		0.540		
F – statistics		7.568***		

Source: Field Data, 2023

The table above shows the coefficients of involvement and participation on effectiveness. The coefficient of multiple determination (R2) was 0.678, which implies that changes in the independent variable explained 67.8% of the variations in dependents. In comparison, 32.2% were unexplained by the stochastic variable, indicating the goodness of fit of the regression model adopted in this study, which is statistically significant at a 1% probability level. The coefficient of involvement and participation was statistically significant and positively related to effectiveness at a 5 percent level (2.495**). This implies that involvement and participation significant.

CONCLUSION AND RECOMMENDATIONS

Proper engagement is important for organizations to attract and engage a high-quality workforce toward organizational performance. Employees need to feel valued and appreciated to boost their morale. Rewarding and recognizing people for performance affects not only the person being recognized but also the organization. Through a rewards program, the entire organization can experience the commitment to excellence when the reward system is credible, and rewards are meaningful. However, the opposite effect will occur if the reward system is broken. Therefore, organizations must ensure that they involve their employees in decision-making to keep them engaged in the organization. The study concluded that involvement and participation significantly affect the effectiveness of Selected Manufacturing Firms in Abia State and recommends that salaries and recognition should be paid as agreed upon by the employer and employee in line with the position and condition of the employee's services towards improving organizational performance. Managers should make sure that their employees participate in training

programs, allowing participative leadership and availing the required resources to create a motivated workforce.
As a result, organizations should establish policies that recognize and reward employee contributions and reward good ideas accordingly. This can involve performance-based incentives, employee recognition programs, and clear pathways for career progression to motivate and engage the workforce.

Firms under the study should establish effective communication channels and feedback mechanisms within the organization. Policies should encourage regular communication between management and employees, creating an open and transparent dialogue that fosters trust and engagement.

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EFFECT OF WORKFORCE INVOLVEMENT AND DECISION-MAKING ON EMPLOYEE PERFORMANCE OF SELECTED MANUFACTURING FIRMS IN ABIA STATE

[1]Kelechi-Nwamuo, Uche D., [2]Ariyo, Igbekele Anthony, [1]Nnadi-Nicholas, Eucharia O. and [1]Emereole, Ibemelam D.

[1]Michael Okpara University of Agriculture, Umudike, [2]Federal Polytechnic Ukana, Akwa Ibom State

Corresponding author: umudike.debyuchekc@gmail.com

ABSTRACT

The study investigated the effect of workforce involvement and decision-making on employee performanceof Selected Manufacturing Firms in Abia State. The study sought to determine the effect of participation on job satisfaction of Selected Manufacturing Firms in Abia State. The study adopted a cross-sectional cross-sectional research design. The researcher adopted a primary source of data to collect information from the respondents. The population of the study was 238 employees in the selected manufacturing firms. The sample size of the study was 149 respondents. The simple random sampling method was used to gather information from the respondents. The study found that there is a significant effect of participation on job satisfaction of Selected Manufacturing Firms in Abia State with p-value =.015<.05% significance level. The study concluded that workforce involvement and decision-making have a significant effect on the employee performanceof selected manufacturing firms in Abia State. The study recommended that the organization under the study should encourage employees to give meaningful suggestions and participate more in decision-making as this enhances organizational performance.

Keywords: Workforce Involvement, Decision-Making Participation, and Employee Performance**.**

INTRODUCTION

Workforce involvement is generally described as an attachment to one's job that exceeds normal levels of commitment. The employee can become so involved with his job that it affects performance in other life role areas. "The degree to which an employee is engaged in and enthusiastic about performing their work is called job involvement". Business managers are typically well aware that efforts to promote workforce involvement among staff tend to pay off substantially since employees will be more likely to assist in furthering their company's objectives. Consequently, workforce involvement is the willingness of a person to work hard and apply effort beyond normal job expectations (Adebayo, 2012). In organizations today, job involvement in decision-making is seen as an individual's psychological identification or commitment to his / her job (Kanungo, 2012). It is the degree to 'which one is cognitively preoccupied with, engaged in, and concerned with one's present job.

Workforce involvement involves the internalization of values about the goodness of work or the importance of work in the worth of the individual (Lodahl & Kejner, 2015). As such, an employee who displays high involvement in their jobs consider their work to be an essential part of their lives, and whether or not they feel good about themselves is closely related to how they perform on their jobs. In other words, for highly involved individuals, performing well on the job is essential for their self-esteem (Lodahl & Kejner, 2015). It is very proper and practical for organizational leaders to function not only as figureheads but also as managers who can inspire and motivate staff to be highly committed and effective in the delivery of their jobs. This is necessary to drive organizational goals and objectives (Bedarkar & Pandita, 2014).

Interestingly, workforce involvement and decision-making are argued to be associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work (Saks, 2006). Similarly, the factors that most influence workforce involvement and engagement are fairness, care and concern for employees, and trust. In order to meet these criteria, firms have followed a multitude of paths in a quest to connect human resource and management strategies with bottom-line financial success.

Workforce involvement and decision-making in the workplace are attempts to measure the extent to which an individual considers the work essential and the performance achieved as a form of appreciation for him or her. Furthermore, some researchers revealed that job involvement plays an essential role in determining an organization's effectiveness (Bedarkar & Pandita, 2014). This study examined the effect of workforce

involvement and decision-making on employee performance of Selected Manufacturing Firms in Abia State.

In Nigeria, especially in the South-South today, there has been much controversy as to whether an employee would participate in managerial decision-making or not. Many researchers argue that the workforce should contribute to decision-making, primarily where it affects them or their jobs (Adeola, 2004). The major problem with employee participation and involvement is resistance to change by management. Managers create an organizational culture that reflects their philosophies and style of management and reinforces their strategies and control. Workforce involvement and decision-making pose a threat to an autocratic manager. Many managers tend to resist participation because it is contrary to the habits that formed their ways of thinking and behaving (Busck *et al.,* 2010). Workforce involvement in decision-making may lead to low performance in an organization, non-participation in decision-making demoralizes employees and employees, and non-participation results in conflicts between management and employees and also leads to indifference to the decision reached by the organization. If management does not indulge in employees' endorsements, employees rapidly conclude that management has no interest in their ideas. Many researchers have taken a more universal approach to studying employee participation, arguing that participative decision-making requires a specific context over and beyond a set of programs and techniques. It is against this backdrop that the study determined the effect of workforce involvement and decision-making on employee job satisfaction.

REVIEW OF LITERATURE

Workforce Involvement

Involvement refers to the level of participation by members in an organization's decision-making process. It also refers to the sense of responsibility and commitment thereby engendered. Involvement entails building human capacity, ownership and responsibility. It is indispensable as it leads to a united vision, values and purpose. Employee Involvement is also called participative management, and it refers to the degree to which employees share information, knowledge, rewards, and power throughout the organization. McShane and Von Glinow (2009) opine that when there is job involvement, employees have some level of authority in making decisions that were not previously within their mandate. They stated that employee Involvement extends beyond controlling resources for one's job; it includes the power to influence decisions in the work unit and organization. The higher the level of Involvement, the more power people tend to have over the decision, process and outcomes.

Along with sharing power, employee Involvement requires sharing information and knowledge because employees require more knowledge to make a meaningful contribution to the decision process (McShane & Von Glinow, 2009). Employee participation has become an essential part of corporate decision-making because it is an integral component of knowledge management. This implies that corporate leaders realize that employee knowledge is a critical resource for competitive advantage, and as such, they encourage employees to share this knowledge. Different forms of workforce involvement exist in organizations. Formal participation occurs in organizations that have established structures and formal expectations that support this form of participation. Informal participation occurs when casual or undocumented activities take place at management's discretion. Job involvement can also be voluntary or statutory. It is voluntary when employees participate without any force or law. It is statutory when the government legislate its activities (e.g. Codetermination, which varies from country to country) decision (McShane & Von Glinow, 2009).

A moderate level of workforce involvement entails when employees are more fully consulted either individually or in groups. They are told about the problem and offer their diagnosis and recommendations, but the final decision is still beyond their control. Employees reduce costs through recommendations to senior executives. The highest level of involvement occurs when employees have complete power over the decision process. They discover and define problems, identify solutions, choose the best option, and monitor the result of their decision (McShane & Von Glinow, 2009).Involvement is the degree to which the employees of an organization are willing to work. Individuals willing to work hard are highly involved, whereas individuals without this willingness are lowly involved. Workforce involvement has been conceptualized as the degree to which one is cognitively preoccupied with, engaged in, and concerned with one's present job. Job involvement is defined as "psychological identification with a job" (Kanungo, 2012). This definition implies that a job-involved person sees his or her job "as an important part of his self-concept" and that jobs "define one's self-concept in a major way" (Kanungo, 2012).

This makes knowledge creation and creativity programs an essential part of training and development, which helps to promote capacity and performance rating (Okebaram *et al.,* 2023).

Two components of workforce involvement have been identified: job involvement in the role (JIR), which is the degree to which one is engaged in the specific tasks that make up one's job, and job involvement in the setting (JIS), which indicates the degree to which one finds carrying out the tasks of one's job in the present job environment to be engaging. An employee is likely to be satisfied and develop a solid attachment to an organization that possesses a certain level of prestige (a favourable reputation) as part of his/her connection with glory. Strong identification with one's organization may translate into a high degree of job involvement. On the other hand, some researchers also argue that job involvement is a personal characteristic. Therefore, it is less likely to be influenced by organizational factors and more likely to be influenced by personal characteristics (Kanungo, 2012).

It has been argued that the degree to which employees are involved in their jobs can be influenced by situational-related (i.e. experiences and psychological reactions to the work) factors. A favourable organizational image fosters the identification of an employee with her/his organization. A theoretical framework relating job involvement to its antecedents correlates and consequences and reports meta-analyses of 51 pairwise relationships involving job involvement. Results of the meta-analyses support research suggesting that job involvement is influenced by personality and situational variables decision (McShane & Von Glinow, 2009).

Hung (2008) stated that workforce involvement is one cognitive need fulfilment, which assists her in working harder and boosts her performance. Indeed, a higher degree of job involvement among the members of an organization is essential to enhance the organization's effectiveness (Hung, 2008). Besides that, there are four ways to categorize job involvement, which consists of (a) active contribution to the job, (b) work as the central life of interest, (c) performance compatibility with the self-concepts, and (d) performance as central to self-esteem. Employees who view their work as the central life of interest will have a greater opportunity to fulfil their major needs. Employees who assist actively in their job, which provides the chance to make decisions and play an essential role in the organisation's goals, will assist them in obtaining high self-esteem and self-regard. In this research, the study adopts Kanungo's definition of the job involvement aspect, as most of the research on job involvement relies on his definition. Hung (2008) mentioned that employees will be motivated to work harder and upgrade their performance once their mental needs are fulfilled.

Also, a highly job-involved individual would have fewer excuses (such as illness or transportation problems) and pay more attention to their job, hence reducing absenteeism and turnover intention. Moreover, based on the research of Preuss and Lautsch (2002), cultivating job involvement is an essential organizational objective as there are many researchers who believe that it is a primary stimulus of organisational effectiveness and individual motivation. Finally, Brown (2008) argued that job characteristics, such as (1) job autonomy, (2) task identity, (3) skill variety, (4) task significance, (5) feedback and also supervisory behaviours, including (1) participative decision making, (2) leader consideration, and (3) amount of communication have significantly linked to job involvement. According to Lodahl and Kejner (2015) held that job involvement encompasses four sub-dimensions:

a) Response to work: In this dimension, Lodahl and Kejner used the expectancy theory to elaborate on it. Under this theory, it has been defined that employees will respond to their work based on different expectations about the work they possess, and the extent to which these expectations are achieved will be able to determine the level of job involvement they experience. Robinson (2004) criticized that employees" need fulfilment due to the congruence between job expectations and the job itself will produce a higher level of job involvement.

b) Expressions of being job involved: It has been explained that the expression of employees on job involvement is different from one and another with the level of job involvement experienced. For instance, some employees may state that they have high job involvement by thinking of the job even when they are not at work. Conversely, others may feel depressed if they fail at something related to the job (Lodahl & Kejner, 2015)

c) Sense of duty towards work: A highly involved individual would have a great sense of duty towards work. It is because they feel great about their work. For instance, in order to complete an assigned task, an employee is willing to work overtime without pay.

d) Feelings about unfinished work and absenteeism: A highly involved employee will try to prevent being absent from work and feel guilty about unfinished work (Lodahl & Kejner, 2015).

Theoretical Framework

Functional Theory or Efficiency Theory by Manju and Mishra (2007)

The study adopted the functional theory of labour welfare, which is also known as the efficiency theory, which suggests that welfare work can be used as a means of securing, preserving and

developing the efficiency and productivity of labour (Manju & Mishra, 2007). The theory states that if an employer takes good care of his workforce, they will tend to be more efficient by improving production and that programmes for housing, education, training, provision of balanced diet and family planning measures are essential for labour welfare as they increase the efficiency of workers in the organization. The theory was helpful in understanding the characteristics of the labour force as reflected in the contemporary support for labour, and it worked well if the employer and employees had the same goal of achieving higher production through better welfare. The theory was adopted in the study since involvement and engagement affect employee performance in an organization(Manju & Mishra, 2007).

Empirical Review

Owolabi and Abdul-Hameed (2011) research examined the relationship between employee involvement in decision-making and firms' performance in the manufacturing sector in Nigeria. Data on employee involvement in decision-making and performance variables were generated by means of questionnaires to 670 manufacturing firms. Responses from the survey were statistically analysed using descriptive statistics, product-moment product-moment correlation, regression analysis, and Z-test (approximated with the independent samples t-test). The results of the study indicate a statistically significant relationship between employee involvement in decision-making and firms' performance, as well as reveal a significant difference between the performance of firms whose employee involvement in decision-making is deep and the performance of firms whose employee involvement in decision-making is shallow. The findings also reveal the involvement of participating firms in employee involvement in decision-making decision-making. The implications of the study include the need for manufacturing firms to demonstrate a high level of commitment to employee involvement in decision-making for performance enhancement.

Simone (2013) study investigated the relationship between employee involvement (EI) and organizational productivity (OP). The possible moderating effect of organizational commitment (OC) was also considered. The four employee involvement elements (power, information, knowledge/skills, and rewards) were examined, and propositions were provided concerning the influence of these elements on organizational productivity and the interaction between these elements and organizational commitment that affects organizational productivity. A conceptual model, implications, and suggestions for future inquiry were presented.

The gap in this literature is very noticeable; literarily, it is being noticed that most of the topics being used for research in the present day have been over-flogged. As a result, researchers no longer conduct research from the deep. In this study, the researcher presented and discussed many ideas that are related to workforce involvement and decision-making in manufacturing firms in Abia State because there is a need for studies like this in developing countries to advance employee involvement and engagement in organizational effectiveness.

METHODOLOGY

The study adopted a cross-sectional cross-sectional research design. The collection of data includes survey collection and the use of questionnaires. The researcher adopted a primary source of data to collect information from the respondents. The population of the study 238 consist of the entire staff of Nigeria bottling company Aba, Abia State, 7up bottling Company Aba, Abia State. Thus, the sample size of the study was 149 respondents. The simple random sampling method was used to gather information from the respondents. The structured questions and a rating scale of 5-point Likert such as 5 (SA), 4 (A), 3 (UN), 2 (SD), and 1 (D). Validity is based on the view that a particular instrument measures what it is meant to or has a purpose to measure.A total of numbers of one hundred and forty-nine (149) questionnaires were distributed to the respondents in the study area. Out of this number, a total of one hundred and thirty-nine (139) were returned. At the same time, ten (10) were rejected as a result of irregularities in the response pattern, which constituted 93.2% of the basis of this study.

RESULTS AND DISCUSSIONS

Table 1: Determine the effect of participation on job satisfaction of Selected Manufacturing Firms in Abia State.

RESPONSES	SA 5	A 4	UN 3	D 2	SD 1	TOTAL	MEAN
Employee involvement enhances job satisfaction	110	20	9	-	-	657	4.7
Employee contribution improves job satisfaction	78	42	-	10	9	587	4.2
Employee responsibility enhances job satisfaction	56	49	4	15	15	533	3.8
Professional and personal growth boost job satisfaction	115	24	-	-	-	671	4.8
Employee rewards and recognition enhance job satisfaction	100	30	-	9	-	638	4.6

Source: Field Survey, 2023

The result in Table 1 reveals that the decision rule means a score of $\bar{x}$ 3.00 was used to make decisions on all five (5) statements aimed at determining the effect of participation on the job satisfaction of Selected Manufacturing Firms in Abia State. The majority of the respondents with the highest means of 4.8, 4.7, 4.6, 4.2 and 3.8 strongly agreed that professional and personal growth boost job satisfaction, employee contribution improves job satisfaction, employee responsibility enhances job satisfaction, leader behaviour increases participation, personal growth improves participation, interpersonal relationships enhance participation, employee involvement enhance job satisfaction and employee rewards and recognition enhance job satisfaction.

Ho_1: There is no significant effect of participation on the job satisfaction of Selected Manufacturing Firms in Abia State.

Table 2: Regression analysis on participation in job satisfaction

Variable	Parameters	Coefficient	Std error	t – value	Sig
Constant	β_0	0.058	0.057	1.017	.000
Participation (X_1)	β_1	0.082	0.072	1.139**	.015
R-Square		0.690			
Adjusted R – Square		0.546			
F – statistics		7.125***			

Source: Field Data, 2023

The table above shows the coefficients of participation in job satisfaction**.** The coefficient of multiple determination (R^2) was 0.690, which implies that changes in the independent variable explained 69.0% of the variations in dependent variables. In comparison, 31.0% were unexplained by the stochastic variable, indicating the goodness of fit of the regression model adopted in this study, which is statistically significant at a 1% probability level.

The coefficient of participation was statistically significant and positively related to job satisfaction at a 5 per cent level (1.139**). With p-value =.015<.05% significance level. This implies that participation has a significant effect on the job satisfaction of selected manufacturing firms in Abia State. The majority of the respondents with the highest means of 4.8, 4.7, 4.6, 4.2 and 3.8 strongly agreed that professional and personal growth boost job satisfaction, employee contribution improves job satisfaction, employee responsibility enhances job satisfaction, leader behaviour increases participation, personal growth improves participation, interpersonal relationships enhance participation, employee involvement enhance

job satisfaction and employee rewards and recognition enhance job satisfaction. The findings of Owolabi and Abdul-Hameed (2011) reveal the involvement of participating firms in employee involvement in decision-making. The implications of the study include the need for manufacturing firms to demonstrate a high level of commitment to employee involvement in decision-making for performance enhancement.

CONCLUSION AND RECOMMENDATIONS

Workforce involvement and decision-making drive commitment. When employees are given the opportunity to be involved in matters that concern them, they begin to see themselves as important members of the firm and try as much to ensure that such decisions succeed. In doing this, they, consciously or unconsciously, get more committed to the realization and actualization of the organization's goals and objectives. Thus, the need for organizations to achieve a high level of employee participation is a call for the introduction and implementation of the organization's employee involvement programme and thus, participation has a significant effect on the job satisfaction of Selected Manufacturing Firms in Abia State. In conclusion, the involvement of employees or their representatives in grievance settlement, new product design, and target setting makes the employees see the final management decision as their own. This helps to minimize conflicts and resistance to planned change and makes employees see management as sincere and honest people who can be trusted.

Against this background, the study recommends that the organizations under the study should encourage employees to give meaningful suggestions and participate more in decision-making as this enhances organizational performance.

It is also important to clearly define roles and responsibilities for participation. When individuals understand their contributions and how they align with the overall goals, they are more likely to get involved.

Policy Implications

Firms should establish policies that support the creation of mechanisms for employee representation, such as the formation of works councils, employee advisory boards, or the inclusion of employees in decision-making committees. This ensures that employees have a voice in organizational decisions.

Organizations under the study should develop guidelines for involving employees in decision-making processes at various levels. This may include seeking input on strategic planning, significant organizational changes, and other decisions that directly impact the workforce.

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EFFECT OF KNOWLEDGE MANAGEMENT AND BUSINESS PERFORMANCE (A STUDY OF SELECTED SMES IN ABIA STATE).

[1]Ufomba Christain O., [2]Iheanacho, Rosemary T. and [2]Anochie, Sandra N.
[1]Clifford University, Abia State, [2]Michael Okpara University of Agriculture Umudike.
Corresponding author: iheanachorosemarytochi123@gmail.com

ABSTRACT
This study investigated the effect of knowledge management and business performance, and ought to examine the impact of knowledge creation on organizational innovativeness of the selected SMEs in Abia State. The study used a survey design. The study employed primary sources of data to gather information from 102 respondents using a stratified sampling method. The Regression model was used to test the relationships between dependent and independent variables of the study. The findings of the study stated that knowledge creation has a significant effect on the organizational innovativeness of the selected SMEs in Abia State. The study concluded that effective knowledge management is a strategic asset that can positively impact an organization's decision-making, innovation, productivity, and overall success. The perspective of the study is that knowledge management fosters an environment where innovation can thrive. By sharing and building upon existing knowledge, organizations can spark new ideas, drive product or process innovation, and stay competitive in a rapidly changing world. The study recommended that firms should not be structured hierarchically but rather should adopt a matrix structure that promotes easy communication processes, which in turn fast-tracks knowledge dissemination.
Keywords: Knowledge Management, Knowledge Creation, SMEs, Business Performance and Organizational Innovativeness

INTRODUCTION
William *et al.* (2012) argue that knowledge is considered the only strategic asset that increases with use but is not reduced. The competitiveness of individuals, companies and countries is also increasingly dependent on their ability to acquire knowledge and use it continuously. In keeping with the vision based on knowledge-based knowledge management, the company has been the key to ensuring the organization's vitality. Some of the benefits knowledge management confers on business performance include improved organizational agility, better and faster decision-making, quicker problem-solving, increased rate of innovation, supported employee growth and development, sharing of specialist expertise, better communication and improved business processes. On the other hand, knowledge management is associated with the following challenges: finding ways to capture and record business knowledge efficiently, making information and resources more accessible to find, motivating people to share, reuse and apply knowledge consistently, aligning knowledge management with the overall goals and business strategy, choosing and implementing knowledge management technology and integrating knowledge management into existing processes and information systems (Alavi & Leidner, 2001).

In today's global market, where market dynamics have intensified competition, organizations are continuously craving for superior and strategic competitive advantage. It has, therefore, become fashionable to leverage sound, current and relevant time-tested market and operational information in the development and implementation of both organizational goals and strategy. Furthermore, to build and sustain a viable organization that can stand the test of time, it is not just essential but strategic to understand clients' and customers' profiles, competition and market demands, regulatory and legal needs and rationale for internal process choices (Zwainet al, 2010). However, more than generating data for and from the situations above is required to guarantee the sustained positive performance of an organization but the judicious organization-wide application of such data. Furthermore, it is commonly said that a business must either evolve or dissolve. To evolve, therefore, requires that a business must create an internal platform that can sufficiently supply it with relevant and current information from its environment. This information must be adequately disseminated among its staff members with the intention of improving their ability to adapt to the changing environment in order to remain afloat despite the market situations (Ahmad & An, 2008).

It is widely acknowledged in management theory and practice that human resources are the most critical factor in the organizational resource mix; hence, there is a focus on the diverse aspects of human resources. One critical element every employee brings to his/her job is the general knowledge which

he/she acquired from diverse sources, which in some cases may be inconsistent with organizational demand. Therefore, organizations face the challenge of ensuring that their employees acquire and apply the proper knowledge, transmit and manage the same for improved performance (Jennex & Olfman, 2004).

To stay competitive and stimulate growth, companies need to develop and maintain a memory of the strategic moves that have helped them in the past. This requires a specific infrastructure and, in some cases, the persistence of some senior officials to provide mentoring and transfer of knowledge to younger employees. Therefore, when the infrastructure needed to store missing knowledge is not instituted, or there is a sudden break in the knowledge retention and transfer process, the overall efficiency of the organization may be compromised. This study is therefore faced with the challenge of exploring the effect knowledge management has on business performance. Furthermore, the researcher has observed a trend in most of the research in this area of expertise, which is excessive focus on its relationship with financial performance; studies are often carried out in well-structured large organizations (Adegbemboet al, 2015). The researcher's interest in covering non-financial indicators, especially issues of organizational innovation, seems new to most of the literature reviewed, thus overcoming a gap in knowledge. Therefore, this current study will provide answers to thenexus between knowledge creation and organizational innovativeness.

LITERATURE REVIEW

Knowledge management (KM)

In order to provide an enabling understanding of the concept of knowledge management, it is of the essence that "knowledge" as a concept is first discussed. A cursory look at the term "knowledge" will show diverse views by different authorities and researchers. In the view of Emadzade et al. (2012), knowledge is a mixture of concepts, ideas, rules, and procedures that guide actions and decisions. Jennex and Olfman (2004), discussing knowledge in the organizational context, defined it as the integrative systematic process to coordinate the organization's activities in light of identifying the cognitive needs and acquiring, transferring, storing, sharing and applying the knowledge to achieve the organizational goals which help the organization to be able to achieve better value and benefit from the knowledge it has. Quintas (2002) expressed the relevance of knowledge in the organization when he asserted that Knowledge is the most important intangible asset. Therefore, business managers strive in many ways to use this asset to create the highest value.

Alireza *et al.* (2011) defined knowledge as thoughts, capabilities, and information that can be enhanced and mobilized to create value. Additionally, they considered knowledge management as the development of a process that relates knowledge requirements to business strategies and facilitates access and representation of individual and organizational knowledge. Nonaka (2007), on the other hand, defined knowledge as a dynamic human process of identifying personal beliefs toward the truth and referred to knowledge management as a knowledge conversion activity for knowledge creation.

Knowledge has been distinguished for its ability for application, integrating theoretical information with practical experience and the general system of individuals and organizations, producing a capability or a new gift called knowledge. Consequently, along with time, this knowledge may become old, so it needs continuous maintenance and improvement. Adegbembo et al. (2015) classified knowledge into three levels: core Knowledge - the minimum amount of knowledge which is necessary for the completion of the teaching process; advanced Knowledge - knowledge that helps the organizations to be competitive in having its knowledge; and innovative Knowledge - knowledge that enables the organizations to govern its industry and competitors. On the other hand, the Organization for Economic Co-operation and Development (OECD) divided knowledge into procedural knowledge (Know-How), cognitive knowledge (Know-What), causative knowledge (Know–Why), and knowledge of (Know–Who).

However, it is possible to determine who owns knowledge (knowledge domiciliation) in the organization. This will reveal whether the employees are the owners by their minds, which may otherwise be referred to as systematic knowledge, or the organization, which is available by other means such as databases, files, systems, regulations and others, which can also be regarded as explicit knowledge. Many opinions agree on the general content of knowledge management, but they vary in the accurate description of the inputs and processes of knowledge management.

To this end, Zwain *et al.*, (2010) defined Knowledge management as the organized collection of information from sources inside and outside the organization, then analyzing and interpreting them so as to conclude indications used in guiding and enriching the organization's processes to improve performance till it reaches higher achievement. It also implies the integrated systematic entry of the management and

the activation of the participation in the organization of information, including databases, documents, policies, and procedures, in addition to the employees' experience. Therefore, knowledge should be employed to solve problems facing the organization, and knowledge application should aim to achieve the organization's goals.

Kongpichayanond (2009) defines Knowledge Management as a process in general system theory with four categories, including knowledge acquisition and creation, knowledge capture, storage and retrieval, knowledge dissemination, transfer and sharing, and knowledge application that organizations decide to manage to gain competitive advantage (CA). Debowski (2006) states that knowledge Management is the process of identifying, capturing, organizing and disseminating the intellectual assets that are critical to the organization's long-term performance.

Gold *et al.* (2001) contend that organizations should have two fundamental abilities to manage knowledge: the process and infrastructure. The first one refers to knowledge acquisition, its conversion and its application processes, while the second one deals with the technology, organizational structure, and corporate culture.

In addition, Alavi and Leidner (2001) emphasized the core implementation of knowledge management in an organization in terms of creating, storing, retrieving, transferring, and applying knowledge. Cepeda and Vera (2007) suggested four divisions of knowledge management, namely: knowledge transfer, knowledge creation, knowledge utilization, and knowledge retention. Knowledge management infrastructures should be in place to help achieve organizational objectives via knowledge management.

Challenges and Factors Affecting Knowledge Management

There are many challenges to knowledge management implementation; hence, it can be discussed only a little here. The complex nature of knowledge and construction context increases the difficulty for organizations to plan and implement formal KM initiatives. While much of the literature has been concerned with discrete projects, project integration proved to be a significant challenge for construction management that goes beyond conventional systems integration, which is primarily concerned with the technical integration of software, hardware com, and communication protocols. to the coordination and management of the different activities necessary for the successful completion and delivery of the project as a whole. The challenges for KM become more complex when dealing with tacit knowledge because individuals commonly regard tacit knowledge as a source of strength and personal rather than organizational property (Carrillo, 2000).

A vast amount of knowledge in the organization resides in the heads of numerous individuals. Employees of organizations are still reluctant to share their knowledge with others, and changing these people's behaviour is not easy (Nonaka, 2007). Many individuals regard their knowledge as a personal property and a source of strength; hence, they find it difficult to encourage the culture of sharing knowledge (Carrillo, 2000). Carrillo (2006) alluded to this when they averred that employees' resistance to knowledge sharing is one of the top barriers to knowledge management within organizations. Reasons, such as the lack of trust among employees, lack of time, lack of KM awareness, lack of openness to new ideas, intolerance of management for creative mistakes and refusal of solutions from people in lower positions, can negatively affect the knowledge-sharing process. Cultural barrier is another impediment to the successful implementation of knowledge management. A successful knowledge management implementation requires a significant change in organizational culture and commitment at all organizational levels (Gupta, 2000).

The lack of employees and management's awareness of the importance and future benefits of knowledge management to their organizations is an essential challenge to a knowledge management application in the organization. The difficulty of knowledge management implementation for many organizations is caused not only by the complicated nature of its operations but also by the fact that the implementation of KM initiatives has often been unplanned and informal. Robinson (2004) posits that most organizations lack a strategy for knowledge management implementation and coordination, and a high percentage of them do not appoint a knowledge manager or a team to implement their KM strategy, with the fact that small and medium organizations are less successful than large counterparts in KM implementation. Carrillo *et al.* (2004) opined that the most significant barrier to KM implementation in UK construction organizations is the lack of standard work processes, such as having too many different procedures to perform similar activities and the lack of systematic procedures for collecting and reusing lessons learned and best practices. Poorly designed knowledge management systems cannot help their users find problem solutions. Instead, can provide the ultimate solutions for their problems. Fong and Wong (2005) argue that despite the importance of KM in reducing the risk of "reinventing the wheel", it is sometimes difficult for people to

reuse and re-apply knowledge. The reason is that it is difficult for employees to understand the context and the reasons for decisions that have been made in other projects.

The ability of KM initiatives to deliver desirable results for individuals and organizations can be affected by environmental factors, such as organizational culture and management support. In order to obtain successful knowledge management systems, organizations need not only to improve knowledge management processes and technological contents but also to enhance the knowledge environment through practices attempting to change behaviours of employees that relate to knowledge, such as building KM awareness and cultural acceptability. Ahmad (2008) discussed environmental factors that can influence knowledge management design, implementation and use. The research has categorized these factors into groups to simplify representing and understanding them, such as individual factors, organizational factors, technological factors, economic factors, customer factors and regulation issues. The study also highlighted the importance of management support and the role of KM teams in maintaining and improving the KMS in organizations. However, some factors may hinder the process of knowledge coordination and sharing among employees in the organization. This may cause failure to use knowledge of other projects and learn from past mistakes and experiences (Carrillo, 2000).

Davenport and Prusak (1998) indicated that some individual behaviours (cultural frictions) can negatively affect the knowledge management process. They suggested a set of solutions to reduce the influence of these factors and encourage knowledge creation and sharing in the organizations by applying some procedures and approaches such as providing incentives, accepting and rewarding creative errors, providing times and places for learning, meeting and sharing knowledge, and encouraging relationships and trust among employees (Ahmad, 2008).

Theoretical Framework

Resource-based view of knowledge management by Grant (1991)

According to RBV, Grant (1991) states that "while resources are the source of a company's capabilities, capabilities are the primary source of competitive advantage. Therefore, it has been emphasized that the key to obtaining sustainable competitive advantage from the resources of the company's resources is to integrate various resources to form organizational solid skills. The RBV of the company, combined with a knowledge-based perspective, highlights the effective ways of coordinating people's activities within the company and integrating their knowledge. According to the resource-based view (RBV), firms derive competitive advantage from the possession of, or access to, unique bundles of resources and capabilities. In a turbulent business environment, such resource-capability bundles must entail the firm’s capacity to adjust to changing environmental conditions, even as they provide continuity in daily operations.

In analyzing sources of competitive advantage, the resource-based framework makes two assumptions: (1) firms within a strategic group may be heterogeneous with respect to the strategic resources they control, and (2) resources may not be perfectly mobile and thus resource heterogeneity can be long-lasting. The resource-based model, then, evolved in the direction of recognizing resource immobility or specificity. The resource-based theory states that corporate reputation can be considered a valuable strategic resource because it contributes to or harms a corporation's sustainable position. The central tenet in resource-based theory is that unique organizational resources of both tangible and intangible nature are the natural source of competitive advantage. With resource-based theory, organizations are viewed as a collection of resources that are heterogeneously distributed within and across industries. Accordingly, what makes the organization distinctive is the unique blend of the resources it possesses that derives its competitiveness. Corporate reputation, for example, is an intangible resource that influences stakeholder behaviour, including employees, management, customers and investors. The firm's resource-based theory places specific emphasis on corporate intangibles that are difficult to imitate, such as tacit knowledge.

In recent years, the resource-based view of competitive advantage has generated insightful debates and informed research aimed at obtaining a better understanding of why some firms outperform others. This view of strategy (hereafter RBV) emerged in the early 80s as a response to the environmental determinism of the industrial organization-based perspective on business policy and strategic management. The industrial organization perspective reduced the managerial imperatives to the analysis of a given industry's structure and the selection of a predetermined set of strategic postures. In response, the RBV emerged in consonance with the development of the strategic choice perspective that rejected the constricted views of industrial organization economics and sought to ascribe greater importance to the roles of managerial judgment and organizational idiosyncrasies in influencing firm behaviour and outcomes. In a nutshell, the RBV's core thesis is that firms that possess valuable, rare, imperfectly imitable, and non-substitutable resources enjoy sustained competitive advantage over their rivals. In its initial conceptions, the term 'resources' was used to cast a wide net over several elements, ranging from managers and employees,

patents, brands, information and financial capital. In further theoretical developments, the RBV has been expanded by viewing managers as bounded rationalists who must make resource choices with imperfect information (Amit & Schoemaker, 1993). The introduction of bounded rationality links the RBV with the evolutionary theories of the firm that view the development of resources as intrinsically embedded in a firm's history and culture.

These views shift the focus of the RBV from resources, *per se*, to the notion of organizational capabilities and routines inherently grounded in organizational knowledge. These insights, taken together, have resulted in the development of theoretical streams, such as the dynamic capabilities perspective and the knowledge-based view of strategy (KBV). These perspectives focus specifically on organizational competencies, capabilities and knowledge that are essentially intangible. Resource-based theory contributes to our understanding of how resources are applied and combined, what makes competitive advantage sustainable, and the origins of heterogeneity. The downside of the resource-based theory is the focus explicitly on organization-specific resources and knowledge as the ultimate resource for organizational success, thereby ignoring the contribution of resources beyond the organization and other knowledge management infrastructure such as technology, culture, databases/repositories as an indispensable part and resources for competitiveness. This theory asserts that the success and attainment of competitive advantage by organizations are determined by possession of or access to bundles of resources such as the tangible (e.g. human resource/workforce, facilities) and intangible (e.g. skills, expertise).

Empirical Review

Mukhtar *et al.* (2015) examined knowledge management, entrepreneurial orientation and firm performance: The Role of Organizational Culture. The findings of the study indicated that knowledge management and entrepreneurial orientation have a significant and positive relationship with business performance and organizational culture is found to partially mediate the relationship between knowledge management, entrepreneurial orientation and business performance.

Olusegun *et al*. (2015) in their study observed that information technology had no significant relationship with entrepreneurial success. It was also shown that organizational culture is positively related to entrepreneurial success. Finally, the findings showed that Knowledge acquired through skill, experience and formal education had a positive relationship with entrepreneurial success. Therefore, the research concludes that entrepreneurial success is guaranteed when enterprises embrace the concept of knowledge management.

Nathaniel's (2015) study focused on the role of knowledge management in sustaining and enhancing innovation in the hospitality industry. The study applied the survey methods where questionnaires were distributed to 240 respondents and analyzed using statistical analysis techniques. The results indicated that the state of knowledge–management framework implementation in the hospitality industry has been accepted. The study also identified knowledge management as one of the most critical resources that contributes to the competitive advantage of an organization.

The study by Ezinma *et al*. (2015) sought to examine the extent to which knowledge management improves the performance of selected commercial banks in Awka. The study specifically sets out to determine if there is a significant relationship between knowledge identification and organizational performance. The findings reveal that there is a positive relationship between knowledge identification and organizational performance. It also reveals that knowledge acquisition has a positive effect on organizational performance. In conclusion, knowledge is a critical resource needed if an organization intends to operate at a level that is equal to no other. The study, therefore, recommends that an effective system should be put in place to ensure that relevant knowledge that will boost performance is identified. Knowledge acquisition is not only about acquiring mere knowledge but also mindfully managing knowledge acquisition activities in order to tap into different kinds of knowledge.

Analysis of the above revealed that research in this area has focused on its relationship with financial performance, thereby giving little or no attention to non-financial indicators of organizational performance. In addition, studies in this field are often carried out in large and well-structured organizations. This is part of the gaps this current study will bridge.

METHODOLOGY

The study used a survey design. The study employed primary sources of data to gather information from the respondents in the study area. The population of the study comprised all the staff of the selected SMEs in Abia State, Nigeria. The total population was 137. The sample size of the study was 102, which was derived from the Taro Yamane formula.A stratified sampling method was adopted, and it gave the staff an equal chance of being selected. The methods used in this study to gather data was a set of questionnaires

structured on a rating scale of 5 Point Likert such as 5 (SA); Strongly Agree 4 (A); Agree; 3 (UN); Undecided; 2 (SD); Strongly Disagree; 1 (D) Disagree. The study employed content validity; the instruments were established by first submitting the prepared questionnaire on separate sheets to the experts in the field for their comments. A regression model was used to test the relationships between dependent and independent variables of the study. One hundred and two (102) questionnaires were administered to the selected SMEs, (15) fifteen copies were wrongly filled and discarded, and eighty-six (86) were recovered with a percentage rate of 84.3%.

Table 1: What is the effect of knowledge creation on the organizational innovativeness of the selected SMEs in Abia State?

	SA	A	UN	D	SD	Total	Mean	SD
	5	4	3	2	1			
1. Training enhances employee	65	104	21	58	14	262		
products development skills?	26	4	29	14	86		3.0	1.4
2. Constant communication with	72	108	66	23	258			
Do customers enhance market innovation?	10	18	2	33	23	86	3.5	1.4
3. Mentorship enhances employee	85	96	3	54	17	255		
strategic choice capability?	17	24	1	27	17	86	3.0	1.5

Source: Field Survey, 2023

Table 1 addresses the effect of knowledge creation on organizational innovativeness. From the result, training has a mean value of 3.0, which is equal to 3.0, followed by constant communication with a mean value of 3.5 > 3.0 decision rule, more so mentorship with a mean value of 3.0 equal to 3.0 decision rule.As a result, training, constant communication, and mentorship affect knowledge creation in the organization of the selected SMEs in Abia State.

$H0_1$: Knowledge creation has no significant effect on the organizational innovativeness of the selected SMEs in Abia State

Table 2: We specify Regression thus;

Variable	Parameters	Coefficient	Std error	t – value
Constant	β_0	0.549	0.121	4.537***
Knowledge creation	β_1	0.820	0.322	2.546***
R-Square		0.740		
Adjusted R – Square		0.719		
F – statistics		19.201***		

*****, **, and * denotes significance of coefficient at 1%, 5%, and 10% level respectively**

Source: Field Survey, 2023.

Table 2: Effect of knowledge management and business performance was analyzed in Table 8 above. The result of the coefficient of multiple determination (R^2) was 0.740, which implies that changes in the independent variables explained 74% of the variations in the dependent variable, while 26% were unexplained by the stochastic variable, indicating goodness of fit of the regression model adopted in this study which is statistically significant at 1% probability level.

F – statistics was 19.201*** This shows that there is no autocorrelation, and therefore, the independent variable knowledge creation is 95% significant and affects business performance. The coefficient of knowledge creation was statistically significant at 1% and positively affected the business performance of the selected SMEs in Abia State. Thus, knowledge creation has a direct impact on the business growth and market share of the organization.

CONCLUSION AND RECOMMENDATIONS

Generally, the world of today is said to revolve around the knowledge economy. Therefore, organizations that must survive the market must develop capabilities to creatively identify the gap in its processes that must be filled, develop and implement actionable strategies to acquire such knowledge, and efficiently

disseminate and apply such knowledge in the course of its operations. This study, therefore, concludes that knowledge management is a very critical enabler for knowledge management to thrive. In conclusion, Effective knowledge management is a strategic asset that can positively impact an organization's decision-making, innovation, productivity, and overall success. We recommend based on our findings, that organizations identify relevant knowledge gaps that need attention to improve work processes, employee skill analysis, constant analysis of the market, and general industry analysis. Firms should not be structured hierarchically but rather should adopt a matrix structure that promotes easy communication processes, which in turn fast-tracks knowledge dissemination.

Policy Implications

Knowledge management fosters an environment where innovation can thrive. By sharing and building upon existing knowledge, organizations can spark new ideas, drive product or process innovation, and stay competitive in a rapidly changing world.

In addition, effective knowledge management enables organizations to make better decisions. By centralizing and organizing knowledge, decision-makers can access relevant information quickly, leading to more informed and data-driven choices.

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KNOWLEDGE MANAGEMENT AND EMPLOYEE PERFORMANCE IN GOLDEN GUINEA NIGERIA BREWERIES PLC. ABIA STATE

[1]Chijindu Sampson J. and [2]Wabara Adolphus N.
[1]Abia State University Uturu
[2]Michael Okpara University of Agriculture, Umudike Umuahia Abia State[2]
Corresponding author: sampson.chijindu@abiastateuniversity.ed.ng

ABSTRACT
The study evaluated the effect of knowledge management on employee performance in Golden Guinea Nigeria Breweries Plc. Abia State. Specifically, the study sought to examine the effect of knowledge acquisition on employees' task performance in Golden Guinea Nigeria Breweries Plc., ascertain the effect of knowledge creation on employees' contextual performance in Golden Guinea Nigeria Breweries Plc. and ascertain the effect of knowledge application on employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State. The study made use of a survey research design. Primary and secondary sources of data were used. A well-structured questionnaire of the closed-ended type designed on a 5-point Likert scale, titled: "Knowledge Management and Employee Performance Questionnaire," was used to elicit primary data from the study respondents. The population of the study consisted of all the employees of Golden Guinea Breweries Plc. which was 293 employees. Using Taro Yamane's formula at an average % confidence level of 95% and error tolerance of 5%, the study sample size was deduced to be 170 respondents. The research instrument was validated by three experts from Michael Okpara University of Agriculture, while the Cronbach Alpha reliability technique was used to test the reliability of the study instrument. Random sampling techniques were used. The study used Ordinary Least Square Regression to analyze the study objectives. Findings revealed that At a 5% level (Sig < .05) of significance, knowledge acquisition had a significant and positive effect on employees' task performance; at a 5% level (Sig < .05) of significance,knowledge creation had a significant and positive effect on employees' contextual performance and at 5% level (Sig < .05) of significance, knowledge application had a significant and positive effect on employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State. Based on these findings, the study concluded that knowledge management positively and significantly affected employee performance in Golden Guinea Nigeria Breweries Plc. Abia State. However, the study recommended that The Management of Golden Guinea Nigeria Breweries Plc. They need to sustain their knowledge acquisition practices in the organization, especially observing individuals solve obstacles, processing and retrieving information more frequently, connecting new information to prior knowledge, and creating cognitive procedures. Management also needs to sustain and enhance the effectiveness of their knowledge application practices in the organization through the adoption of existing knowledge in decision making, performing the task, maintaining a decision support system, and maintaining a fault diagnosis system and help desk system, as these will help to enhance knowledge application in the organization and boost employees' performance.
Keywords: Knowledge management, employee performance.

INTRODUCTION

Knowledge Management (KM) is pivotal in shaping the performance of employees within a manufacturing organization, serving as the cornerstone for streamlined processes, innovation, and enhanced productivity. The advent of a knowledge-based economy has placed more emphasis and increased awareness on the need to manage knowledge effectively. According to Gakuo and Rotich (2017), this need stems from the fact that KM is vital for organizations seeking to ensure competitive advantage and sustainable employee performance. KM presents itself as a model with a set of techniques and tools dealing with management processes and physical and digital infrastructure that facilitate favor, and stimulate the human processes of creating, sharing, and disseminating individual and collective knowledge (Demir & Ahmet, 2019). Over the years, there have been concerns about creating, acquiring, sharing, and improving the reuse of knowledge; it is only in the last decade and a half that a distinct field termed 'knowledge management' emerged in the business domain (Castaneda & Cuellar, 2020; Huie *et al*., 2020). The nexus between KM and employee performance in manufacturing is profound, as the systematic acquisition, sharing, and application of information equips workforce members with the tools required to meet industry demands, drive efficiency, and achieve sustainable growth.

KM transforms employees' capabilities within a manufacturing setting, fostering a culture of continuous learning, collaboration, and adaptability that directly influences performance outcomes. Notably, countless organizations have benefited immensely from adopting knowledge creation, acquisition, and sharing, as it has been proven to improve organizations' efficiency and make them remain viable in turbulent environments (Gakuo & Rotich, 2017). Nu Graha *et al.* (2019) noted that KM is an essential asset of any organization, and as intellectual capital, it is a cornerstone for gaining a sustainable competitive edge in competition. Harnessing the potential of knowledge management in a manufacturing context is equivalent to unlocking employees' full potential, as it not only bolsters their skill sets but also establishes a knowledge-sharing ecosystem that propels collective performance to new heights.Good employee performance is the key to the success of any organization. Employee performance depends on the employees' experience, abilities, and skills, which fall within the requirement to have the necessary qualifications and experience to fill positions. Good performance is also based on scientific background and practical qualification within the policies and procedures of work, previous experiences, skills, and individual abilities towards supporting innovation, which organizations breed through KM (Abdullah *et al.*, 2020). In Golden Guinea Nigeria Breweries Plc Abia State, KM is believed to breed knowledge and expertise that produces new skills, enables work performance, encourages innovation, inspires employees' tasks and adaptive performance, enhancing organizational efficiency. In this context, understanding how knowledge is acquired, disseminated, and applied becomes paramount in optimizing employees' potential and, consequently, the organization

CONCEPTUAL REVIEW

Knowledge is the most valuable asset of any organization and, consequently, the most difficult to manage. Nevertheless, some organizations barely establish knowledge-based systems, and even more worrisome, they hardly apply knowledge management practices in their business processes. AlMulhim (2020) noted that organizations no longer compete solely based on financial capital and strength; knowledge is the new competitive advantage in the business domain. The widespread maxim reinforces this stance that knowledge is power; given this claim, it can be thought that the management of knowledge is the key to power, and the inability to manage knowledge in an organization can impede employees' performance and reduce the chances of the organization to compete favorably within the industry.
InGolden Guinea Nigeria Breweries Plc. Abia State, it is believed that KM, which encompasses knowledge acquisition, knowledge creation, and knowledge application, will breed expertise that produces new skills, enables work performance, encourages innovation, and inspires employees' task and contextual performance, which will enhance organizational efficiency. However, the absence of clear metrics to assess the effect of knowledge management initiatives on performance makes it challenging for Golden Guinea Nigeria Breweries Plc. to quantify the benefits and adjust their strategies accordingly. The inability to regularly update and validate stored knowledge can result in reliance on outdated information, leading to suboptimal decision-making and organizational performance. Also, employees might refrain from adopting new knowledge management systems or practices, impeding the integration of innovative solutions and hindering performance improvements. Based on this, the study

i. will advance understanding of the nexus between knowledge creation
ii. , acquisition, and application on employee performance.

Knowledge Management

Smith and Lyles (2013) highlighted that KM focuses on intellectual capital management (ICM), which is those pieces of knowledge that are of business value to the organization— intellectual capital or assets. Although some of these are more visible (patents, intellectual property), the majority consists of know-how, experience, and expertise that tend to reside within the head of one or a few employees. (González-Valiente *et al.,* 2019). KM is the process of accessing experience, knowledge, and expertise that produces new skills, enables work performance, encourages innovation, and creates customer value.It creates a favorable environment for knowledgeable individuals to use, share their expertise, and create new knowledge (Antony & Hamad, 2020). Kanmal *et al*. (2019) defined knowledge as a corporate asset, but in practice, it is grounded in different organizational functions and is stored in repositories and individuals' memories. King and Lekse (2013) stated that KMt is the deliberate and systematic coordination of an organization's people, technology, processes, and structure to add value through reuse and innovation. This coordination is achieved through creating, sharing, and applying knowledge and feeding the valuable lessons learned and best practices into corporate memory to foster continued organizational learning (King & Lekse, 2013).

Employee Performance

Al-Hussaini *et al*. (2019) stated that employee performance refers to how well and effectively or resourcefully an individual takes action and contributes behaviors to the organization's goal attainment. Employee performance focuses directly on employee efficiency by ascertaining the number of acceptable goods produced by an employee in a business or work environment within a specific time frame (Igwedinmah, 2020). Employee performance is a system that consists of the processes used to identify, encourage, measure, evaluate, improve, and reward employee performance (Ofili et al., 2021). Employee performance is about creating, controlling, and measuring a culture based on employees' performance, where the system control should ensure that the employer does the right things, not the things right (Ofili *et al.,* 2021). Vithanage and Arachchige (2017) defined performance as objective functional behavior as a result of forces or pressures resulting from the individual and as the interaction and harmony between the internal forces of the individual and the external forces surrounding him. Performance is a crucial metric for assessing whether or not a work is completed satisfactorily. An organization's success or failure is directly connected to the work done by its employees (Sopiah *et al.,* 2020).

Dimensions of Employee Performance

Task performance

Task performancecomprises job-explicit behaviors, which include fundamental job responsibilities assigned as a part of the job description. Task performance requires more cognitive ability and is primarily facilitated through task knowledge (requisite technical knowledge or principles to ensure job performance and having the ability to handle multiple assignments), task skill (application of technical knowledge to accomplish tasks without much supervision), and task habits (an innate ability to respond to assigned jobs that either facilitate or impede the performance) (Conway, cited in Rabindra & Lalatendu, 2017). Therefore, the primary antecedents of task performance are the ability to do the job and prior experience. In an organizational context, task performance is a contractual understanding between a manager and a subordinate to accomplish an assigned task. Entrusted task performance is broken into two segments: technical–administrative task performance and leadership task performance. The expected job performance comprises planning, organizing, and administering the day-to-day work through technical ability and business judgment, called technical–administrative task performance. Leadership task performance is labeled through setting strategic goals, upholding the necessary performance standards, and motivating and directing subordinates to accomplish the job through encouragement, recognition, and constructive criticism (Borman & Brush, cited in Rabindra & Lalatendu, 2017; Tripathy, 2014).

Contextual performance

Contextual performanceis a prosocial behavior demonstrated by individuals in a work set-up. Such behaviors are expected of an employee but are not overtly mentioned in one's job description. This kind of unstated expectation is called prosocial behavior or extra-role behavior. Brief and Motowidlo, cited in Rabindra and Lalatendu (2017), defined it as a behavior that is (i) accomplished by a member of an organization, (ii) is directed towards an individual, group, or organization with whom the member interacts while carrying out his or her organizational role, and (iii) finally such behavior is performed to encourage the betterment of individual, group, or organization towards which it is directed. Supporting the ideology above, many prominent researchers in this field have advocated that expected job performance carries two vital dimensions: one as the work required by an organization concomitant to one's role and the other one as the discretionary work behavior (Van Dyne & Lepine, cited in Rabindra & Lalatendu, 2017). Following on the importance of voluntary work behavior or non-task performance, later psychologists have coined it as a contextual performance, which connotes helping others adapt to the varied job roles (Borman & Motowidlo, cited in Rabindra & Lalatendu, 2017). Bergeron, cited in Rabindra and Lalatendu (2017), recommends that contextual performance should consist of multiple "subdimensions" such as teamwork, allegiance, and determination.

Knowledge Acquisition

The entire basis for investing in and developing knowledge-management technologies is premised on the belief that an effective Knowledge Management System (KMS) should disseminate knowledge throughout the organization and provide the necessary components to improve decision-making capabilities (Alavi & Leidner, 2009). The impact of using KMS on explicit knowledge acquisition is critical, given that explicit knowledge provides the foundation for and is the precursor of tacit knowledge development (Roberts & Ashton, 2013). Acquiring explicit knowledge is critical in developing and sustaining expertise (Barua & Mukhopadhyay, 2009). Broadly, knowledge can be tacit and explicit, and it can be non-analyzable. It can be difficult to transfer knowledge efficiently and effectively, especially across a range of units of analysis: individual, group, and organization, and can be socially complex, such as managing talent in mergers and acquisitions and other knowledge-intensive settings. Whelan et al. (2010) view knowledge using this kind

of lens. According to Robertson and Hammersley (2009), the acquisition of knowledge and the process of organizational learning are foundational components of the knowledge process from more specific socio-cultural perspectives.

Knowledge Creation

Getting information is a knowledge management practice associated with the acquisition of knowledge. Knowledge-sharing words such as achieve, seek-after, produce, develop, catch, and coordinate describe the knowledge acquisition process (Phong *et al.,* 2018; Kipkosgei et al., 2020). Knowledge acquisition is aided by the creation of new knowledge in order to learn old information. Development necessitates a combination of effort and a high level of ability to recognize and obtain new knowledge (Dalkir, 2005). According to Darroch (2003), knowledge acquisition is captured by six (6) factors: valuing employees' attitudes and opinions and encouraging up-skilling; being market-focused by actively obtaining customer/industry information; being sensitive to information about changes in the marketplace; employing and retaining a large number of people trained in science, engineering, or mathematics; and employing and retaining a large number of people trained in science, engineering, or mathematics.Remarkably, several factors describe knowledge creation: market information around the organization; knowledge on the job using techniques such as quality circles, case notes, mentoring, and coaching to create, acquire, and share knowledge using technologies like teleconferencing, videoconferencing, and groupware (Castaneda & Cuellar, 2020) Again, knowledge created and acquired from diverse assets inside and outside an organization is ineffective if they are converted into a gainful practicable structure (Andrews & Smits, 2018; Huie *et al.,* 2020).

Knowledge Application

Knowledge application refers to activities associated with the flow of knowledge from one party to another (Newman & Conrad, 2009). According to Marwick (2011), efficient and effective knowledge management typically requires an appropriate combination of organizational, social, and managerial initiatives and the deployment of appropriate technology to apply knowledge. Although a complete tacit-explicit split cannot be achieved (Inkpen & Dinur, 2012), it is a useful way to understand the different characteristics and nature of different types of knowledge that require different processing, procedures, and tools to be managed and dealt with. The application of knowledge is an essential process of knowledge management. Knowledge management (KM) is now becoming more vital for successfully managing construction projects and complementing organizations' business activities. With the new economy increasingly becoming more knowledge-based, knowledge is becoming the most critical asset for organizational success, along with other assets such as capital, materials, machinery, and properties (Kelleher & Levene, 2010).

Theoretical Review

The study is anchored on the Resource-based View (RBV) theory. The Resource-Based View (RBV) theory states that an organization acquires a competitive advantage by developing human and other resources to add unique and sustainable value to an organization (Barney, 1991). According to Ling and Jaw (2011), the firm's resources can be categorized in several ways, from all the assets, the processes, and even the knowledge posed by the firm that facilitates effective and efficient performance. Under the RBV theory, firms focus internally on unique resources rather than externally. This is for physical and intellectual resources that enhance talent, competitive advantage, and performance (Newbert, 2008; Takeuchi *et al.,* 2007). The RBV theory of the firm provided that the firm gets added value through the identification of its unique resources and then putting strategies in place to ensure that those resources are well developed in a rare and inimitable way such that they cannot be substituted by the competitors (Wright *et al.,*2009).

On the other hand, Wright *et al.* (2001) refer to resources-based theory as the attribution of resources internal to an organization that is rare, valuable, inimitable, and non-substitutable. In the RBV context, value is defined as resources that exploit organizational opportunities not currently available to other competitors in the market (Barney, 1991). Equally, when a resource is referred to as inimitable, other firms will find it difficult to copy or reproduce the resources for their benefit (Takeuchi *et al.,* 2007). Finally, in RBV, the organization's resources are non-substitutable and unique to the extent that no similar resources on the market can serve the same purpose (Allen & Wright, 2007). Therefore, an organization with valuable, inimitable, and non-substitutable resources is said to have met RBV's theoretical and practical status and can utilize the status to gain sustainable competitive advantage and performance (Allen & Wright, 2007).

Building on the RBV, the knowledge-based view of the firm considers knowledge as its most strategically significant resource (Grant, 2008). This view considers a firm to be a distributed knowledge system composed of knowledge-holding employees, and this view holds that the firm's role is to coordinate the

employees' work so that they can create knowledge and value for the firm (Spender, 2006). Thus, in the context of this study, it is argued that knowledge acquisition, creation, and application in Golden Guinea Nigeria Breweries Plc. will enhance employees' task and contextual performance.

Empirical Review

Tesfaye (2022) explores the effect of a knowledge management system (KMS) on employees' performance in Ethio Telecom's customer service department. The study used a quantitative research design. Based on the usability of the knowledge management system in Ethio Telecom, call center employees working on 994 contact centers were selected, and a questionnaire was administered. A structural equation model (SEM) and confirmatory factor analysis (CFA) were conducted to analyze the relationship and impact of KMS on Ethio Telecom employees' performance. The analysis findings indicate that the relationship between knowledge acquisition operational performance and quality performance was supported and significant. However, the relationship between knowledge acquisition and innovation was not supported or significant. The study recommended that to maximize productivity/performance, the organization's management staff should seriously consider knowledge acquisition-related activities.

Okpebenyo (2021) assessed the link between knowledge acquisition, creation, and the performance of employees: A case study of Northern Nigeria. The cross-sectional research design was adopted, and a questionnaire was the primary data collection instrument, administered to 154 employees of 3 selected mining firms in Northern Nigeria. Descriptive and inferential statistical techniques were employed to analyze the data obtained in the field survey. Findings revealed that knowledge acquisition positively and significantly affects the performance of mining firms' employees; however, the study found that knowledge creation negatively and significantly affects employees' performance. Given the findings, it was recommended, among others, that the management of mining firms should put more effort into structuring and constructing an information framework to improve and support job and employee performance.

Alyammahi *et al*. (2022) focused on the effect of knowledge management and organizational learning on the organizational performance of UAE's oil and gas sector. Primary data was collected by administering the questionnaires distributed among different managers and employees of the ADNOC, UAE. However, only 374 usable responses were obtained by the researcher for analysis. The most important test used is structural equation modeling through PLS to find the direct relationships. The results have indicated that the direct impact of knowledge creation, knowledge transfer, knowledge sharing, organizational learning, and organizational innovation is significant in organizational performance. The researcher identified the study's theoretical, practical, and policy-making implications.

Abdul, Muhammad, and Sayed (2022) examined the impact of knowledge management on organizational effectiveness in the government sector AJ&K. A quantitative casual hypothetical study was conducted. The sample was drawn from Government Health Sector AJ&K and targeted the employees of Government Health Sector AJ&K, using nonprobability random sampling techniques. Questionnaires were distributed among the sample of 110. Results indicated a significant impact of knowledge management on organizational effectiveness, and it is a significant organizational and social concern. The research shows that knowledge management strengthens the organization's effectiveness by bringing innovations. This ultimately increases the productivity of the organization.

Sultan and Shimelis (2021) explored the role of knowledge management practice on the performance of higher education institutes at Jimma University College of Agriculture and Veterinary Medicine in Ethiopia. The study mainly employed a quantitative descriptive research design using a cross-sectional and qualitative approach. For data collection, the pre-tested self-administered structured questionnaire was used. Considering 143 academic staff, a population studied using a census approach out of 214, excluding those currently engaged in further study. Descriptive and inferential statistics analysis employed utilizing STATA 14. The significant finding includes the willingness to share knowledge sharing and discovery at a high level. The Chi-square ($\chi 2$) test indicated an association between knowledge capture, sharing, utilization, organization support, IT support, and performance. The study recommended that colleges spend more on knowledge managementpractices that can improve innovation utilized in funding research, enhance teamwork, improve technology, and motivate academic staff to retain and share knowledge.

METHODOLOGY

A survey research design was used to conduct this research. Primary and secondary sources of data were used for the study. Thus, the researcher used a well-structured Knowledge Management and Employee Performance Questionnaire. The questionnaire was a closed-ended type designed in five (5) point Likert scale form (Strongly Agreed = SA, Agreed = A, Disagreed = D, Strongly Disagreed = SD, and Neutral = N). The close-ended questionnaire has two to five options. The questionnaire was structured into 3

sections, A, B, and C, which captured all the study objectives. The researcher adopted a self-administration system of questionnaire administration. The researcher distributed the questionnaire to Golden Guinea Breweries Plc Abia State employees by hand and returned after one (1) week as agreed upon with the employees to collect the completed questionnaires.

All the employees of Golden Guinea Breweries Plc. Abia State was the target population of this study. According to the survey undertaken by the researcher as of June 2023, Golden Guinea Breweries Plc Abia State has 293 employees, according to the organization's Human Resource Department. Based on this population, an average confidence level of 95% and an error tolerance of 5% were used to deduce the actual sample size of the study. The sample size was calculated using Taro Yamane's formula. The computed sample size for the study was 170, and this number of employees was sampled in the organization. The research instrument was validated by three experts from Michael Okpara University of Agriculture, while the Cronbach Alpha reliability technique was used to test the reliability of the study instrument.The researcher adopted random sampling techniques. Random sampling techniques were employed in sampling the respondents in Golden Guinea Breweries Plc. Abia State because all Golden Guinea Breweries Plc employees were offered random sampling techniques. Abia State has an equal opportunity to be selected to serve as the study's sample size.

To measure the dependent and independent variables of the study objectives, the researcher sought the components of the independent and dependent variables in the 3 specific objectives and used them to design the study questionnaire into a five-point Likert scale.The researcher used Multiple Regression analysis of the study objective with Statistical Packages for Social Sciences (SPSS) version 23. Out of the 150 questionnaires returned, 145 valid questionnaires were used for data analysis.

RESULTS AND DISCUSSIONS

Effect of Knowledge Acquisition on Employee Task Performance in Golden Guinea Nigeria Breweries Plc. Abia State

Table 1, Multiple Regression analysis results on the effect of knowledge acquisition on employee task performance in Golden Guinea Nigeria Breweries Plc. Abia State.

Variables	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	2.113	0.097		21.880	0.000
Observation of an individual solving the obstacle	0.132	0.056	0.179	2.361	0.019
Process and retrieve information frequently	0.096	0.055	0.118	1.748	0.082
Learning and retrieval conditions	0.364	0.048	0.512	7.588	0.000
Connecting new information to prior knowledge	0.164	0.034	0.216	4.827	0.000
Creating cognitive procedure	0.030	0.040	-0.042	-0.746	0.457
R^2		**0.841**			
$\overline{R}$		**0.83.7**			
F-Statistics		**204.873**			

a. Dependent Variable: Employees' task performance.
b. Predictor: Knowledge acquisition.
c. Source**:** Field Survey 2023.

The result in Table 1 above shows the effect of knowledge acquisition on employee task performance in Golden Guinea Nigeria Breweries Plc. Abia State. The result revealed that Observation of an individual solving the obstacle with a regression coefficient of (0.132), process and retrieving information frequently with a regression coefficient of (0.096), learning and retrieval conditions with a regression coefficient of (0.364), and connecting new information to prior knowledge with the regression coefficient of (0.164) are the components of knowledge acquisitionthat are significant and positively affect employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State at a 5% level (Sig < .05) of significance. The result signified that observing an individual solving the obstacle, processing and retrieving information frequently, learning and retrieval conditions, and connecting new information to prior knowledge are the knowledge acquisition components that positively affect employees' task performance in Golden Guinea Nigeria Plc. Abia State. Thus, at a 5% level (Sig < .05) of significance, knowledge acquisition positively and significantly affected employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State.

The R- R-square, which shows the proportion of variation in the dependent variable that the independent variables can explain, revealed that 84.1% of the total variation in employees' task performance was

explained by the variation in observation of an individual solving the obstacle, process and retrieve information frequently, learning and retrieval conditions are similar and connecting new information to prior knowledge. Meanwhile, the Adjusted R explains the effect of a decrease in the degree of freedom arising from the various independent variables. The F-ratio (204.873) is significant at 5% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Effect ofKnowledge Creation on Employee Contextual Performance in Golden Guinea Nigeria Breweries Plc. Abia State.

Table 2, Multiple Regression analysis result on the effect of knowledge creation on employee contextual performance in Golden Guinea Nigeria Breweries Plc. Abia State.

Variables	Unstandardized Coefficients B	Unstandardized Coefficients Std.Error	Standardized Coefficients Beta	t	Sig.
(Constant)	1.416	0.075		18.995	0.000
Inventing and innovating new concepts/approaches	0.495	0.047	0.520	10.570	0.000
Inventing and innovating new methods/techniques	0.210	0.035	0.230	6.051	0.000
Inventing and innovating new products/services.	0.138	0.035	0.173	3.973	0.000
Obtaining information and data through a variety of techniques	0.133	0.041	0.132	3.218	0.002
Combination of previously acquired ideas to create new insights	-0.018	0.042	-0.018	-0.430	0.668
R^2		**0.900**			
$\bar{R}$		**0.898**			
F-Statistics		**349.860**			

a. Dependent Variable: Employees' contextual performance.
b. Predictor: Knowledge creation.
c. Source**:** Field Survey 2023.

The result in Table 2 above shows the effect of knowledge creation on employee contextual performance in Golden Guinea Nigeria Breweries Plc. Abia State. The result revealed that Inventing and innovating new concepts/approaches with a regression coefficient of (0.495); Inventing and innovating new methods/techniques with a regression coefficient of (0.210); Inventing and innovating new products/services with a regression coefficient of (0.138) and obtaining information and data through variety of techniques with the regression coefficient of (0.133) are the components of knowledge creationthat are significant and positively affect employees' contextual performance in Golden Guinea Nigeria Breweries Plc. Abia State at a 5% level (Sig < .05) of significance. The result signified that: Inventing and innovating new concepts/approaches, inventing and innovating new methods/techniques, inventing and innovating new products/services, and obtaining information and data through a variety of techniques are the knowledge creation components that are positively affecting employees' contextual performance in Golden Guinea Nigeria Breweries Plc. Abia State. Thus, at a 5% level (Sig < .05) of significance, knowledge creation positively and significantly affected employees' contextual performance in Golden Guinea Nigeria Breweries Plc. Abia State.

The R- R-square, which shows the proportion of variation in the dependent variable that the independent variables can explain, revealed that 90.0% of the total variation in employees' contextual performance was explained by the variation in inventing and innovating new concepts/approaches, inventing and innovating new methods/techniques, inventing and innovating new products/services and obtaining information and data through a variety of techniques. Meanwhile, the Adjusted R explains the effect of a decrease in the degree of freedom arising from the various independent variables. The F-ratio (349.860) is significant at 5% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Effect ofKnowledge Application on Employee Task Performance in Golden Guinea Nigeria Breweries Plc. Abia State.

Table 3, Multiple Regression analysis result on the effect of knowledge application on employee task performance in Golden Guinea Nigeria Breweries Plc. Abia State.

	Unstandardized Coefficients		**Standardized Coefficients**		
Variables	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.549	0.060		25.822	0.000
Adoption of existing knowledge in decision-making	0.172	0.045	0.188	3.821	0.000
Adoption of existing knowledge in performing task	0.275	0.028	0.303	9.760	0.000
Maintaining a decision support system	0.334	0.030	0.405	11.110	0.000
Maintaining a fault diagnosis system	0.111	0.034	0.107	3.241	0.001
Maintaining the help desk system	0.108	0.034	0.099	3.173	0.002
$\mathbf{R^2}$		**0.924**			
$\overline{\mathbf{R}}$		**0.922**			
F-Statistics		**472.798**			

a. Dependent Variable: Employees' task performance.
b. Predictor: Knowledge application.
c. Source**:** Field Survey 2023.

The result in Table 3 above shows the effect of knowledge application on employee task performance in Golden Guinea Nigeria Breweries Plc. Abia State. The result revealed that the adoption of existing knowledge in decision-making with a regression coefficient of (0.172), adoption of existing knowledge in performing tasks with a regression coefficient of (0.275), maintaining a decision supports system with a regression coefficient of (0.334), maintaining fault diagnosis system with the regression coefficient of (0.111) and maintaining help desk system with the regression coefficient of (0.108) are the components of knowledge applicationthat are significant and positively affect employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State at a 5% level (Sig < .05) of significance. The result signified that the adoption of existing knowledge in decision making, adoption of existing knowledge in performing tasks, maintaining a decision support system, maintaining a fault diagnosis system, and maintaining a help desk system are the knowledge application components that are positively affecting employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State. Thus, at a 5% level (Sig < .05) of significance, knowledge application positively and significantly affected employees' task performance in Golden Guinea Nigeria Breweries Plc. Abia State.
The R- R-square, which shows the proportion of variation in the dependent variable that the independent variables can explain, revealed that 92.4% of the total variation in employees' task performance was explained by the variation in Adoption of existing knowledge in decision-making, adoption of existing knowledge in performing task, maintaining decision supports system, maintaining fault diagnosis system and maintain help desk system. Meanwhile, the Adjusted R explains the effect of a decrease in the degree of freedom arising from the various independent variables. The F-ratio (472.798) is significant at 5% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Discussion of Findings

Table 1 revealed that at a 5% level (Sig < .05) of significance, knowledge acquisition significantly and positively affected employee task performance in Golden Guinea Nigeria Breweries Plc. Abia State.
The findings agree with Tesfaye's (2022) and Okpebenyo (2021) findings. Tesfaye (2022) explored the effect of a knowledge management system (KMS) on employees' performance in the customer service department of Ethio Telecom and revealed a positive relationship between knowledge acquisition operational performance and quality performance. Okpebenyo (2021) assessed the link between knowledge acquisition, creation, and the performance of employees: A case study of Northern Nigeria and revealed that knowledge acquisition positively and significantly affects the performance of mining firms'
Table 2 revealed that at a 5% level (Sig < .05) of significance,knowledge creation significantly and positively affected employee contextual performance in Golden Guinea Nigeria Breweries Plc. Abia State.
The findings are in consonant with the findings of Alyammahi *et al.* (2022). Alyammahi *et al.* (2022) examined the effect of knowledge management and organizational learning on the performance of the UAE's oil and gas sector. They revealed that knowledge creation significantly affects organizational performance. However, the study does not agree with Okpebenyo's findings (2021). Okpebenyo (2021)

assessed the link between knowledge acquisition, creation, and the performance of employees: A case study of Northern Nigeria revealed that knowledge creation negatively and significantly affects employees' performance.

Table 3 revealed that at a 5% level (Sig < .05) of significance, knowledge application significantly and positively affected employee task performance in Golden Guinea Nigeria Breweries Plc. Abia State.

The findings are in tandem with the findings of Abdul *et al.* (2022) and Sultan and Shimelis (2021). Abdul *et al.* (2022) examined the impact of knowledge management on organizational effectiveness in the government sector AJ&K and revealed a significant impact of knowledge management on organizational effectiveness. Sultan and Shimelis (2021) explored the role of knowledge management practice on performance in higher education institutes at Jimma University College of Agriculture and Veterinary Medicine in Ethiopia. They revealed an association between knowledge capture, sharing, utilization, organization support, IT support, and performance.

CONCLUSION AND RECOMMENDATION

Based on the findings, the researcher concluded that knowledge management positively and significantly affected employee performance in Golden Guinea Nigeria Breweries Plc. Abia State,as revealed by this study. The following recommendations were considered relevant based on the findings of the study:

i. The Management of Golden Guinea Nigeria Breweries Plc. Abia State needs to sustain its knowledge acquisition practices in the organization. However, they need to implement platforms where employees can share insights, articles, and best practices, fostering a culture of collaborative learning, curiosity, and continuous improvement and aligning knowledge acquisition with practical tasks, allowing employees to apply newly acquired knowledge directly to their roles.

ii. The Management of Golden Guinea Nigeria Breweries Plc. Abia State needs to maintain its knowledge-creation practices in the organization. However, they must foster a culture promoting ongoing learning and development. Provide access to training programs, workshops, and resources that enable employees to acquire new skills and stay updated on industry trends. Implement digital platforms where employees can share insights, experiences, and best practices. Nurture an environment where employees feel comfortable experimenting with new ideas.

iii. The Management of Golden Guinea Nigeria Breweries Plc. Abia State needs to sustain and enhance the effectiveness of its knowledge application practices by implementing comprehensive training programs that focus not only on theoretical knowledge but also on practical application relevant to employees' tasks. Utilize technology platforms and tools that enable employees to apply their knowledge seamlessly in their workflow, promoting efficiency and accuracy.

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DIGITAL FINANCIAL SERVICES AND SUB – SAHARAN AFRICA ECONOMIC DEVELOPMENT - PANACEA OR PLACEBO?

[1]Nwadike, Emmanuel C. and [2]Osuala, Alex E.
[1] Federal University of Technology Owerri, Imo – State.
[2.] Michael Okpara University of Agriculture, Umudike, Nigeria
Corresponding Author: chijioke.nwadike@futo.edu.ng

ABSTRACT
This study investigated the effect of digital financial services on Sub-Saharan Africa (SSA) economic development. Economic development was proxied by human capital development index (HDI) while digital financial services was proxied by automated teller machine (ATM) volume transactions, point of sale (POS) volume of transactions, mobile banking service (MBS) volume of transactions, and number of ATMs available. Five SSA countries, namely, Nigeria, Ghana, Uganda, Cabo Verde and Kenya were chosen for the study. The data used for the study spanned from 2009 to 2020. The study was anchored on the Technology Acceptance Theory which is based on the belief that improvement in the economy is enhanced through using particular new technology and information system in business transactions. Panel unit root test carried out using different criteria showed that the data set were largely stationary at levels. Consequently, the fixed effects model was used for the analysis based on the outcome of the Hausman test. The results showed that the volume of ATM transactions and the number of ATMs had negative effect on HDI, implying that the higher the ATM usage and number of ATM available the lower economic development in SSA. The results also show that POS volume of transactions, and mobile banking volume of transactions had statistically significant effect on economic development in SSA. The study recommends that banks should ensure that ATMs provide convenience for customers by making them accessible and usable while also considering the rate charged for rendering such services. Consequently, the study concluded that digital financial services is a long road which SSA needs to travel and make the economy significantly successful.
Keyword: Digital financial services, economic development, Sub- Sahara.

INTRODUCTION
Digital technologies have been developed to make it simpler for local citizens who cannot otherwise afford a bank account to access extra financial services, making them financially privileged. (Anarfo and Abor, 2020). Digital technologies are also said to be helpful for achieving sustainable development and for integrating the financial system. (Asongu *et al.*, 2021; Nchofoung &Asongu, 2022).
Policymakers and scholars have given digital financial inclusion a lot of attention in recent years (Ozili, 2018). It is regarded as a change agent with the potential to bring about a revolutionary advancement in the international financial industry.
Financial systems in developed and emerging nations have evolved as a result of digitization. (Chinoda and Kapingura, 2023). Financial inclusion is increasing as a result of fewer barriers in traditional financial systems, which is also recognized as a critical factor in reaching the 2030 Sustainable Development Goals (Kooli *et al.*, 2022; Allen *et al.*, 2016). It has been argued that nations with high levels of digital financial inclusion are better prepared to handle challenges associated with economic growth and development. (Khera *et al.*, 2021; Shen *et al.*, 2021; Thaddeus *et al.*, 2020). Therefore, increasing digital financial inclusion can benefit several people and organizations in those nations that may be impacted by economic downturns (Chinoda & Kapingura, 2023).
People in some nations cannot purchase financial services due to the high poverty rate, which makes living miserable. Digital technology ensures the affordability of financial services for those who are less privileged. The stability of digital financial services is not assured due to technological advancements and increased competition among financial institutions, which has led many people to question the regulatory impact of digitalization on the stability of the financial system. Digital financial services (DFS) are frequently seen as a productive approach to generate opportunities to enhance financial inclusion because they lower the cost of delivering these services. They lower transaction costs for businesses while promoting financial inclusion.
DFS use digital remote techniques to supply financial services from a wide variety of providers to a wide variety of receivers including e-money, mobile money, card payments, and electronic funds transfers. In

addition to facilitating money transfers, DFS provide a safe place to store electronic money (sometimes referred to as mobile money or e-money) (Buckley *et al.*, 2016). Agur *et al.*, (2020) described digital financial services as financial services (such payments, remittances, and credit) available and provided through digital channels, such as mobile devices, the internet, web transactions, point of sale, etc. These include tried-and-true instruments (like debit and credit cards, which are often offered by banks), as well as innovative approaches based on digital platforms, cloud computing, and distributed ledger technology (DLT), which include peer-to-peer (P2P) applications, digital currency, and crypto-assets. Where and when DFS are applied profitably, they have implication for economic development.

Economic development is generally understood by Myint and Krueger (2016) and Panth (2021) to be the structural transformation of an economy through the use of more advanced and automated technologies in order to increase labor productivity, employment, incomes, and population growth. Economic development should be supported by changes to the institutional, economic, and political settings in order to permit the transformation of the economy. A country's attempts to fight poverty are regarded to be greatly aided by economic growth since it allows for higher incomes, more job possibilities, the delivery of better goods and services, and the use of cutting-edge industrial technologies. Audu (2012) stated that economic advancement leads to better self-esteem standards, freedom from persecution, and more possibilities. It is a process that results in long-term improvements in a country's political, social, and technological economic institutions as well as an increase in real national income. The ordinary person's real income increases as a result.

Banks make money from a range of transactions carried out at points of sale, on mobile banking platforms, and through automated teller machines. With an increase in transactions, the bank makes more money from each individual account. Lower transaction volume, however, can affect the withdrawals banks make from their customers' accounts, which will cut into their earnings.

In remote locations, it is exceedingly difficult to find commercial banks and automated teller machines. Banks are cautious about installing off-site automated teller machines (ATM) and opening branches in outlying areas. Security risks, poor internet access, insufficient power sources, and a poor road system are some of the significant challenges that banks face while maintaining off-site ATMs. When opening new bank branches, the majority of banks take into account the size of the local economy, the availability of markets that can support bank branches, operational costs, staffing,power supply, availability of road network, security concerns; and all of these make the people in the rural areas financially excluded.

This study which focused on five specific SSA countries, namely, Nigeria, Ghana, Cabo Verde, Kenya, and Uganda evaluated the effects of digital financial services on economic development in Sub Sahara Africa by analyzing specifically the effects of Automated Teller Machine (ATM) volume of transactions, the Mobile Banking Services (MBS) volume of transactions, Point of Sale (POS) volume of transactions, and the availability of ATM per 100,000 adults, on economic development of selected Sub - Saharan African countries. The study aims to address the question of whether digital technology improves the SSA financial sector by allowing more people access to financial services or whether it makes it more vulnerable to attacks.

REVIEW OF LITERATURE

According to Pazarbasioglu *et al.* (2020), Digital financial services refer to financial goods and services that make use of digital technologies. The features covered by these services include transaction accounts, payment processing, savings, loans, and insurance. Digital channels include, for example, ATMs (for fund transfers and bill payments), POS terminals, mobile wallets (for mobile money), internet banking (e-banking), and other digital systems. (Alliance for Financial Inclusion, 2016; Kambale, 2017). As opined Joki *et al.* (2019), one of the most important IT developments in financial services is mobile banking. Agur, *et al.* (2020) stated that digital payments are non-cash transactions carried out through digital channels.

Several scholars such as Gomber *et al.* (2017), Ozili (2018) and Al-Smadi (2022), opined that Digital Finance (DF) is a response to technological advancements in the financial sector. It is said to encompass all electronic financial products and services, including financing, investment, payment, insurance, and financial information delivered through digital channels. DF has numerous advantages for individuals, businesses, governments, and the economy as a whole. One significant benefit is that it provides the government with a platform to increase its overall expenditure and tax revenue, as a result of the growth of financial transactions. This is supported by Manyika, Lund, Singer, White and Berry (2016) and (Ozili 2018).

According to Roessler (2018), the digital economy has become a significant global driver of economic development and innovation in the twenty-first century. Faster data communication between individuals,

businesses, networks, and systems has been made possible by digital technology, which encompasses software, hardware, and infrastructure. This has enhanced productivity, efficiency, and global economic integration. It is critical to guarantee access to inexpensive financial services in order to encourage the reduction of poverty and economic development (Rana *et al.*, 2018). Digital financial services (DFS) are defined by the World Bank as financial services that are provided and used via digital technology. Through digital payment systems, mobile devices, and electronic money models, DFS offers fundamental financial services to those with low incomes, lowering transaction costs and raising transaction speed, security, and transparency. This enables the underprivileged to gain access to more individualized financial services (Pazarbasioglu *et al.,* 2020).

However, despite the observed benefits of DFS, some scholars have argued that DFS can harm financial inclusion.Thaddeus *et al.,* (2020), noted that there are various ways in which the provision of digital finance can be biased. Geographical bias is one method, whereby digital finance companies may stop offering services to high-risk rural areas or communities that lack the infrastructure to support them. To allow the effective operation of digital financial services, some infrastructure, such as current mobile phones with the required software and applications, is required. Additionally, when providing digital financial services, educational bias may be introduced.

Theoretical Review

The theories that relateto the present study are: Technology Acceptance Theory, Diffusion of Innovation Theory, Financial Intermediation Theory, Theory of Financial Innovations, and Bank-led Theories.

The goal of Fred Davis's technology acceptance theory, which was developed in 1985, is to comprehend how people adopt and make use of information technology to drive economic development. It has been applied in information systems research to simulate the acceptance and adoption of new technologies. The Diffusion of Innovation Theory, which Gabriel and Rogers popularized in their book "Diffusion of Innovations" in 1962, describes how new concepts and technologies spread across cultures. According to this theory, diffusion is the process of a social system's members conveying innovation through time, and through certain channels.

Financial institutions' ability to combine deficit and surplus spending units is explained by the financial intermediation theory. Instead of lending directly to deficit units, this theory aims to explain why surplus funds are first transferred to banks, who subsequently lend to them. This theory, which offers comprehensive information about the financial system and economic development, is based on Raymond Goldsmith's work in 1969. It has been found that when the economy grows, the financial system advances more quickly than national wealth. The efficient distribution of capital within the economy is ensured through financial intermediation, which fosters economic expansion.

The financial innovation theory, which Silber (1983) first proposed, contends that the development and extension of financial institutions are the main forces behind financial inclusion. Li and Zeng (2010)'s work on financial innovations was intended to address the flaws in the financial industry, such as information asymmetry, transaction costs, and administrative costs. To increase a company's liquidity and draw in new clients, financial innovations can either be completely original solutions or established practices that adopt cutting-edge technical improvements.

The bank-led hypothesis was created as a result of banks' efforts to create innovative methods for connecting with clients through agents. According to this idea, which is supported by Kiburi (2016) and Kendall (2012), licensed financial institutions, mostly banks, use retail agents to offer clients financial services. Banks produce financial goods and services and then hand them off to retail salespeople, who deal with all consumer contacts. Clients are required to keep an account with their primary bank since banks continue to be the major providers of financial services.

Empirical Review

Anane and Nie (2022),using a representative national dataset from Ghana, explored digital financial services adoption determinants. The study quantified the role played by each of the six incorporating factors and controlled four socio-demographic characteristics. The work also assessed the adoption level among key socio-demographic groups. The determinants of DFS were estimated using Logit specification, and average marginal effects method. The logit model indicated that effort expectancy, awareness, facilitating conditions, transaction cost, security and privacy, and self-efficacy positively influence DFS adoption and increase DFS adoption by 0.7%, 2.3%, 28.5%, 3%, 2.1%, and 2.4%, respectively. Additionally, the results indicated a significant disparity in adoption levels across key socio-demographic variables, including education level, gender, urban and rural residence, and administrative regions of Ghana. They came to the conclusion that DFS offers affordable, practical, and secure financial services with the ability to considerably help those living in poverty. However, obstacles to the implementation of

DFS include a lack of infrastructure, poor financial awareness, and regulatory restrictions. In order to encourage the adoption of DFS and financial inclusion in developing economies, the study suggested addressing these issues.

Mulungula and Nimubona (2022) examined digital financial inclusion and trade openness in Africa.The objective of the study was to test the impact of digital financial inclusion on trade openness using a panel of 16 African countries observed over a 17-year period from 2002 to 2018. The study employed a methodology based on static panel estimates using the generalized least squares (GLS) method. The results obtained revealed that only one variable (logGDP) out of the five retained has a statistically significant influence on trade openness at the 1% level ($p > t = 0.06$) with a coefficient opposite to the predicted sign of (−0.2371655). (ATMs) was found to have negatively and statistically significant influence on trade openness at the 1% level.

Ifediora *et al.* (2022) examined the effect of financial inclusion on economic growth using panel data collected from 22 SSA nations between the years of 2012 and 2018. They discovered, using the system Generalized Method of Moments (GMM) that the financial inclusion dimensions of availability, penetration, and composite have a significant and positive impact on economic growth, whereas the financial inclusion dimension of usage has a small but positive impact on economic growth. Also, whereas outstanding deposits have a negative impact on economic growth, bank branches and ATMs have a positive and large impact. Results for mobile money indicators from 2012 to 2018 showed that while mobile money agents hinder economic growth, mobile money accounts and transactions promoted it.

Kouladoum *et al.* (2022) examined the relationship between digital technology and financial inclusion in 43 countries in Sub-Saharan Africa. The methodologies used were the Generalized Method of Moment (GMM) to take care of double causality and country heterogeneity and IV-Tobit to take into account the limited range in the dependent variables.They found that, as measured by ICT indicators, digital technology has a positive, significant impact on financial inclusion. They also discovered that as digital technologies advance, the rate of financial inclusion in Sub-Saharan Africa rises. As a result, more investments in human capital development, financial infrastructure development, and technological infrastructure advancement are required, as financial literacy can play a significant role in fostering financial stability and inclusive finance in Africa.

Sawadogo and Semedo (2021) applied a finite mixture model to a sample of 28 sub-Saharan African countries to analyze the impact of financial inclusion on income inequality between 2004 and 2016. Theyopined that the effect of financial inclusion on income inequality differs across groups of countries with similar but unobserved characteristics. They found that the impact of financial inclusion on income inequality varies across two distinct classes of countries. Furthermore, they proved that countries with high institutional quality are more likely to be in the class where financial inclusion reduces income inequality. The results pass a battery of robustness checks. The findings highlight the need for sub-Saharan African countries to develop better democratic environments and institutions if they expect to reap the benefits of financial inclusion.

In most of the earlier studies, majority of the authors concentrated on a single nation,using for instance, Indian nation (Dahiya and Kumar, 2020; Sethi and Sethy, 2020; Sethy, 2016); China (Huang and Zhang, 2019; Shen *et al.,* 2018); Nigeria nation (Babarinde *et al.,* 2021; Aribaba*et al.,* 2020; Ifere &Okosu, 2019; Nwude& Nnaji, 2018; Ezenwakwelu, 2018; Bertram *et al.,* 2016; Abdu *et al.,* 2015; Abimbola *et al.,* 2015); Poland (Stezelecka, 2020); Ethiopia (Desalegan &Yemataw, 2017); Pakistan (Raza *et al.,* 2019); Indonesia (Saraswati, 2020; Shofawati, 2019), and Ghana (Anane & Nie, 2022); with only a few studies covering multiple countries in Sub-Saharan Africa. The present study attempted to close the knowledge gap by regressing digital financial services and financial inclusion proxies on economic development in Sub-Saharan African countries using the human development index as the of economic development variable. For digital financial services this study used three independent variables namely automated teller machines volume of transactions, mobile banking services volume of transactions and point of sale volume of transactions while two variables were employed as a measure of financial inclusion such as number of ATMs per 100,000 adults and the number of commercial banks per 100,000 adults were employed in the study.

METHODOLOGY

A quantitative longitudinal research design was used for this investigation. A longitudinal design measures the same people' characteristics across time on at least two occasions, but ideally more. Each variable is measured over two or more different time periods. This enables the researcher to track how variables change over time.

The World Development Indicators (WDI) and Central Bank databases of the chosen nations were used as the primary sources of the secondary data for this study, which covered the years 2009 to 2020.

Model Specification

The technology acceptance theory, which contends that ICT promotes economic development, served as the foundation for the model employed for this study. As demonstrated in equation 3.1, this study employed the Thaddeus, Ngong, and Manasseh (2020) model in accordance with the technological adoption theory.

$$GDPGR_{it} = \beta_0 + \beta_1 ATM_{it} + \beta_2 CBB_{it} + \beta_3 LOS_{it} + \beta_4 \text{MOMO}_{it} + \mu_{it} \quad (3.1)$$

Where,

GDPGR = growth rate of GDP per capita

ATM = Automated Teller Machines (ATMs) per 100,000 adults

CBB = Commercial Bank Branches Per 100,000 Adults

LOS = Outstanding loans per 1,000 adults

MOMO = Mobile money transactions per 100,000 adults

The above model was modified by dropping GDPGR and LOS to suit the objectives of this study. GDPGR was replaced by HDI since this study discusses economic development which can be measured by HDI. LOS was also dropped because it was used as a control variable in the Thaddeus *et al.,* (2020) model and is not a component of digital financial services and the volume of POS transactions included instead.

This study was based on five independent variables namely the volume of ATM transactions, POS transactions, mobile transactions, number of ATM machines and the number of commercial banks while human capital development was used as the dependent variable. A logarithm of ATM, POS and MBS was taken to standardize the variables (NATM and NCOB).

The functional form of the model is as displayed in Equation below:

$$HDI = f(ATM, POS, MBS, NATM, NCOB) \quad (3.2)$$

The econometric form of the model was specified as follows:

$$HDI_{it} = \beta_0 + \beta_1 LOG(ATM)_{it} + \beta_2 LOG(POS)_{it} + \beta_3 LOG(MBS)_{it} + \beta_4 NATM_{it} + \beta_5 \text{NCOB}_{it} + \mu_{it} \quad (3.3)$$

Where,

HDI = human development index

ATM = volume of ATM transactions

POS = volume of POS transactions

MBS = volume of mobile transactions

NATM = number of ATM machines/100,000 adults

NCOB = number of commercial banks/100,000 adults

LOG = logarithmic notation

β_0 = intercept

$\beta_1 - \beta_5$ = is the parameter of explanatory variables

μ_{it} = the disturbance terms

i = number of countries

t = 2009 – 2020 (sampled period)

Description and justification of model variables

The variables were chosen based on their utilization in prior studies, their theoretical relationships among them.

Dependent variable

Human capital development index (HDI)

One of the key indices for assessing economic development is the human capital development index (HDI), which takes into account three factors: life expectancy, education (adult literacy),and the standard of living. It is a method for raising labor performance. The HDI evaluates a nation's capacity to mobilize the economic and professional potential of its people in order to increase their level of productivity.

Independent variables

ATM: This variable is assessed by the number of transactions carried out at automated teller machines (ATMs) 100,000 adults. It is anticipated that an increase in the number of ATMs will lead to an increase in financial accessibility among citizens and rise economic development.

POS: This determined the number of Point-of-Sale (POS) transactions carried out by POS agent businesses for every 100,000 adults. A higher POS is achieved with the addition of more outlets not only makes

financial transactions simpler but also promotes broader financial inclusion, which in turn encourages economic development and the growth of human capital.

MBS: The mobile variable, which stands for mobile transaction volume per 100,000 adults using personal electronic devices, is denoted by the abbreviation MBS. Because mobile transactions may be completed whenever it is convenient for the customer, this has the effect of making financial transactions simpler, which should lead to an increase in HDI.

NATM: stands for the number of automated teller machines that are present for every 100,000 adults. This evaluates the degree to which the availability of ATMs contributes to HDI, which in turn influences economic development. It is anticipated that keeping all other factors constant, expanding access to automated teller machines (ATMs) to a greater population will result in an acceleration in financial inclusion and efficiency thus leading to an increase in the HDI level.

NCOB: This quantifies the extent to which the proliferation of commercial bank branches helps to facilitate a growth in HDI and signifies the number of commercial bank branches that exist for every 100,000 adults. It is anticipated that a rise in the number of commercial banks will result in an increase in the availability of financial services and an increase in HDI over time.

Sample size

The study employed purposeful criterion sampling method to select the SSA countries to be included in the study. Criterion sampling involves searching for cases or individuals who meet certain criteria. The criteria used in the sample were that the countries that rank among the top bank penetration in the last 13 years and availability of requisite data for such countries. Only five (5) met these criteria, hence the sample size was five (5) out of the forty-six (46). The study used annual panel data for years from 2009 to 2020 of each country. The period 2009 to 2020 constituted the period with the latest data and therefore most relevant to the current study. Therefore, there were a total of 60 observations in the regression analysis. A twelve-year panel data analysis was used to examine the relationship between HDI and digital financial services and financial inclusion.

Techniques of data analysis

Descriptive statistics

Descriptive statistics are brief informational coefficients that summarize a given data set, which can be either a representation of the entire population or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variability (spread). The descriptive statistics was used to examine the socio –economic characteristics of the individual variables collected and used for the analysis for the countries of study and then pooled together in the same manner to observe the impact of the explanatory variables on the selected countries in Sub – Saharan Africa.

Stationarity tests

This study applied the panel least squares estimation technique due to the nature of data involved in the study. Prior to the estimation proper, a test for stationarity of data was carried out. Stationarity is a property of an underlying stochastic process and not the observed data such the joint distribution of a set of n consecutive random variables, in a series, is the same, regardless of where in the series it is chosen (Kendall and Stuart, 1983). A stationary series is one with a mean value which will not vary with the sampling period. In contrast, non-stationarity can simply be defined as processes that are not stationary and that have statistical properties that are deterministic functions of time (Kendall and Stuart, 1983).

Fixed Effects (FE) and Random Effects (RE) models

The FE model assumes that each group (SSA countries), is associated with a non-stochastic group-specific factor to the dependent variable, industrial value added. In other words, the FE's assumption is that specific individual effect is correlated with the explanatory variable(s) while RE is based on the assumption that individual specific effects are not correlated with the explanatory variables. The FE equation is as specified in Equation (3.4):

$$Y_{it} = \alpha_i + \beta . X_{it} + \mu_{it} \quad \textbf{(3.4)}$$

where α_i is the country FE, that is individual intercepts fixed for a given N and the model captures no overall intercept. The random disturbance term is denoted by μ_{it}. Under the FE model, consistency do not demand that the individual intercepts whose coefficients are $\alpha_i's$ and μ_{it} are not correlated. In this case, only $E(X_{it}\mu_{it})$ must hold. The variables are defined as follows:

Y_{it} = value of the dependent variable, HDI

X_{it} = value of the independent variables, LOG(ATMVOL), LOG(POSVOL), LOG(MBSVOL), NATM and NCOB for the ith country for t^{th} time period.

t = 2009 – 2020

$i = 1 - 13$

The inclusion of error term (μ_{it}) in the model is a way of controlling for unobservable influences on HDI but these unobservable influences could be random (i.e. stochastic). To deal with this problem, the RE (random effects) model becomes relevant. The RE model is expressed as:

$$Y_{it} = \alpha_i + \beta . X_{it} + V_i + \mu_{it} \quad (3.5)$$

where,

$V_i \sim iid(0, \sigma_\alpha^2)$

$\mu_{it} \sim iid(0, \sigma_\alpha^2)$

where V_i is unobserved country specific effects. The V of diverse individual SSA countries are independent, with zero mean, and they are assumed not to be too far from normality. The overall mean is captured in α. V_i is expected to be homoscedastic and time invariant across individual countries.

For both FE and RE, t-test is applied to test the significance of variables' coefficient while F-test is used to ascertain whether the coefficients are simultaneously or jointly significant.

Hausman test

Hausman test is used to decide whether to use fixed or random effects model.

The Hausman test basically tests whether the unique errors (μ_i) are correlated with the regressors; the null hypothesis is they are not.

Specifically, the null and alternative hypotheses of the Hausman test are presented as follows:

Ho: RE model is appropriate.

H_1: FE model is appropriate.

If the p-value of the Hausman test is greater than 0.05, the RE model is preferred. On the other hand, the FE model is alied if the p-value is less than 0.05.

RESULTS AND DISCUSSIONS

The data analysis began with a summary of the dataset's essential properties in Table 4.1. The mean, maximum and lowest values, standard deviation, skewness, and Kurtosis are among these characteristics.

Table 1: Descriptive statistic

	HDI	LOG(ATM)	LOG(POS)	LOG(MBS)	NATM	NCOB
Mean	0.572600	16.17642	15.50859	15.92360	16.39867	0.758267
Median	0.573500	15.71993	15.23003	16.81756	9.840000	0.500000
Maximum	0.674000	20.69119	19.89913	21.98371	52.07000	2.910000
Minimum	0.482000	13.19114	12.27880	10.04377	3.360000	0.007000
Std. Dev.	0.053294	2.177495	1.686441	1.632495	1.555585	0.818077
Skewness	0.176651	0.705660	0.645947	0.132250	0.324090	0.217532
Kurtosis	1.998305	2.495363	3.104674	1.593036	3.114824	3.231858
Jarque-Bera	2.820537	5.616199	4.199863	5.123769	4.056510	4.915823
Probability	0.244078	0.060320	0.122465	0.077159	0.081153	0.092565
Observations	60	60	60	60	60	60

Source: Author's computations using EViews 10.0

From the descriptive statistics, it is seen that the average HDI for the selected countries was 0.572600 which happens to be far from the 0.8 benchmark stipulated by the United Nations. The range of values for the HDI was 0.482000 to 0.674000, indicating a poor human capital development in SSA. This is attributed to the low funding of human capital sectors such as education and health sectors in the region.

In general, this is one of the assumptions of normal distribution, the mean and median of most variables were averagely of the same value. Furthermore, the standard deviation values, which assess the series' dispersion from the mean, indicated that all of the series in the distribution were sparsely scattered from the mean. This showed that the series might have normal distribution characteristics. This was corroborated by the skewness findings, which show that virtually all of the skewness values are within the average of the threshold (0), indicating that the series in the distribution are slightly skewed either positively or negatively but are otherwise normal. Additionally, the -value of the Jarque-Bera test, a test for normality; because all -values are larger than the significant level of 5%, the null hypothesis that the series are normally distributed cannot be rejected. Finally, the standard deviation, skewness, and Jacque-Bera findings supported the normality of the series in the distribution.

Unit root test

Before starting the regression analysis, all of the variables were tested for stationarity. The study used the Levin, Lin, and Chu; Breitung t-stat; and Fisher Chi-square tests to do the investigation. The results of unit root testing are shown in Table 4.2.

Table 2: Summary of panel unit root test

Variable	Levin, Lin & Chu T	Breitung t-stat.	ADF-Fisher Chi-square	–Fisher Chi-square	Status	Remark
HDI	-1.74739** (0.0403)	-2.20368** (0.0344)	8.15009 (0.6142)	23.3148*** (0.0096)	I(0)	Stationary
LOG(ATM)	-5.16296*** (0.0000)	-2.94308*** (0.0016)	16.8125 (0.0786)	62.9586*** (0.0000)	I(0)	Stationary
LOG(POS)	-20.2005*** (0.0000)	-1.88323 (0.9702)	30.2332*** (0.0008)	56.0029*** (0.0000)	I(0)	Stationary
LOG(MBS)	-3.55144*** (0.0002)	-3.55144 (0.3857)	21.0868** (0.0335)	48.9640*** (0.0000)	I(0)	Stationary
NATM	-1.95521** (0.0253)	-1.84431 (0.9674)	25.5931** (0.0182)	20.5333** (0.0246)	I(0)	Stationary
NCOB	-7.17419*** (0.0000)	-2.51006*** (0.0060)	24.5949** (0.0214)	6.43876 (0.7772)	I(0)	Stationary

Source: Author's computations using EViews 10.0

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Panel Regression Estimation

The study applied the three regression approaches used for the panel least squares: the pooled, fixed effects, and random effects as presented in Tables 4.3 to 4.5 below:

Pooled model

In pooled regression, all observations are simply pooled and the grand regression is estimated, ignoring the data's cross-section and time series characteristics, in which case the error term represents everything. Because the observations in this model were pooled together, the heterogeneity or uniqueness that exists between the variables is hidden (Hills et al., 2007). Table 4.3 displays the results of the pooled regression.

Table 3: Panel regression (Pooled)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(ATM)	-0.004981	0.002399	-2.076283	0.0426
LOG(POS)	0.001662	0.004604	0.361055	0.7195
LOG(MOBILE)	-0.002826	0.002381	-1.187047	0.2404
NATM	0.001410	0.000628	2.245881	0.0288
NCOB	0.023240	0.008961	2.593436	0.0122
C	0.631649	0.043541	14.50700	0.0000
R-squared	0.639842	Mean dependent var		0.572600
Adjusted R-squared	0.606494	S.D. dependent var		0.053294
S.E. of regression	0.033432	Akaike info criterion		-3.863995
Sum squared resid	0.060354	Schwarz criterion		-3.654561
Log likelihood	121.9199	Hannan-Quinn criter.		-3.782074
F-statistic	19.18682	Durbin-Watson stat		1.128966
Prob(F-statistic)	0.000000			

Source: Author's computations using EViews 10.0

The pooled regression results may not be suitable for the estimation when compared to the Fixed and Random Effects models, hence it may not be reliable though its coefficient of determination denoted by the R-squared and Adjusted R-squared appears to be quite moderate at 0.639842 and 0.606494, respectively to show a good fit. Although, the F-statistic (19.18682) and its associated probability value (0.00000) showed that the explanatory variables collectively and significantly explained the variations in the dependent variable, but the Durbin-Watson statistics of 1.128966 suggested presence of significant positive autocorrelation which indicates that the model could be spurious and not suitable for the analysis.

Hence, the study proceeded with other panel regression approaches based on the fixed effects and random effects techniques of panel least squares.

Fixed effects model

Because the fixed-effects model accounts for all time-invariant variations between individuals, the estimated coefficients of the fixed-effects models cannot be affected by missing time-invariant attributes. According to Stock and Watson (2003), if the unobserved variable does not vary over time, any changes in the dependent variable must be attributed to sources other than the fixed features.

Table 4The fixed effects estimation result.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(ATM)	-0.006572	0.002754	-2.386347	0.0363
LOG(POS)	0.006119	0.002451	2.496600	0.0159
LOG(MBS)	0.006677	0.002268	2.944644	0.0049
NATM	-0.000462	0.001160	-0.397923	0.6924
NCOB	0.008538	0.003978	2.146184	0.0367
C	0.381735	0.030472	12.52734	0.0000
		Effects Specification		
Cross-section fixed (dummy variables)				
R-squared	0.968071	Mean dependent var		0.572600
Adjusted R-squared	0.962324	S.D. dependent var		0.053294
S.E. of regression	0.010345	Akaike info criterion		-6.153697
Sum squared resid	0.005351	Schwarz criterion		-5.804639
Log likelihood	194.6109	Hannan-Quinn criter.		-6.017161
F-statistic	168.4427	Durbin-Watson stat		1.873639
Prob(F-statistic)	0.000000			

Source: Author's computations using EViews 10.0

The fixed effects results shows that the overall estimated model was good as it has an R-squared and Adjusted R-squared of 0.968071 and 0.962324, respectively. It implies that, in the fixed effects model, the independent variables accounted for approximately 96% of total variation in the dependent variable (HDI). Similarly, the F- statistic value of 168.4427 and its associated probability value of 0.000000 showed that the overall model was statistically significant at 5% level of significance. Durbin-Watson statistics is 1.873639, which is approximately 2; therefore, it can be concluded that there was absence of serious autocorrelation in the fixed effects model. As such, the fixed effects model is more reliable when compared to the pooled regression. However, the study proceeded with the random effects model to compare its results with the fixed effects model.

Random effects

The random effects model is based on the assumption that the individual-specific impact or variation among entities is a random variable that is uncorrelated with the predictor/explanatory factors. Table 4.5 displays the results of the random effects model.

Table 5: Random effects

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(ATM)	-0.001207	0.002657	-0.454256	0.6515
LOG(POS)	0.005719	0.002401	2.381955	0.0208
LOG(MBS)	0.006653	0.002218	2.998958	0.0041
NATM	0.000197	0.001059	0.186235	0.8530
NCOB	0.007181	0.003867	1.856821	0.0688
C	0.388807	0.044832	8.672454	0.0000
		Effects Specification		
			S.D.	Rho
Cross-section random			0.075210	0.9814
Idiosyncratic random			0.010345	0.0186
		Weighted Statistics		
R-squared	0.763308	Mean dependent var		0.022717
Adjusted R-squared	0.741392	S.D. dependent var		0.020306

S.E. of regression	0.010326	Sum squared resid	0.005758
F-statistic	34.82890	Durbin-Watson stat	1.795369
Prob(F-statistic)	0.000000		

Source: Author's computations using EViews 10.0

The random effects estimates displayed in Table 4.5 displayed some degree of stability as shown by the coefficient of determination, F-statistic and Durbin-Watson statistic. The coefficients of determination as shown by the R-squared and Adjusted R-squared were 0.763308 and 0.741392, implying that the independent variables explained roughly 74% of the variations in the dependent variable. The F-statistic (34.82890) and its associated probability value of 0.000000 indicated that the random effects model was stable and well-specified. Also, the Durbin-Watson statistic of 1.795369 is less than the threshold of 2 but approximately 2, implying presence of minimal autocorrelation in the model.

Choosing the best model

We related the random effects model to the fixed effects models using the Hausman's test, and the results are reported in Table 4.6. The most significant practical distinction between fixed and random effects is that random effects are calculated using partial pooling whereas fixed effects are not. Partial pooling indicates that if a group has few data points, the group's effect estimate will be relied in part on more abundant data from other groups (Seddigi and Lawler, 2000). The null hypothesis states that the chosen model has random effects, whereas the alternative hypothesis states that the model has fixed effects.

Table 6: Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.810564	5	0.0070

Source: Author's computations using EViews 10.0

Table 4.6 demonstrates that the test's Prob (Chi-Sq. Statistic) is less than 5%. (0.0070). As a result, we are unable to reject the null hypothesis that the proper model is the fixed-effects model. In comparison to the random effect model, the fixed effects model is more suited to describing the effects of digital financial services, and economic development in SSA.

Heterogeneity in digital financial services, among the SSA countries using correlation.

Table 7 shows the heterogeneity and contribution of digital financial services, financial inclusion among the SSA countries using correlation.

Variables	Nigeria	Ghana	Uganda	Cabo Verde	Kenya
ATMV	0.891699	0.809690	0.872890	0.936264	-0.242507
	0.0001***	0.0014***	0.0002***	0.0000***	0.4476
POSV	0.778654	0.856719	0.923179	0.941714	0.903371
	0.0028***	0.0004***	0.0000***	0.0000***	0.0001***
MBSV	0.697155	0.809312	0.941612	0.351078	0.984267
	0.0117**	0.0014***	0.0000***	0.2632	0.0000***
NATM	0.852119	0.940089	0.225309	0.875420	-0.008309
	0.0004***	0.0000***	0.4814	0.0002***	0.9796
NCOB	-0.604096	0.341696	0.898940	0.962041	0.945715
	0.0375**	0.2770	0.0001***	0.0000***	0.0000***

Source: Authors computation using e-views.

The table above represents the contribution of each variable on HDI across the countries.

Note: * and ** denote significance at 1% and 5% respectively**

The contribution of ATMV was significantly large in all the countries except Kenya, which could imply that Kenya is yet to prioritize ATM usage when compared to Nigeria, Ghana, Uganda and Cabo Verde. This could also imply that the level of transactions carried with the ATMs in Kenya were lower than those of to Nigeria, Ghana, Uganda and Cabo Verde. Ranking the level of ATM usage based on the correlation coefficients across the country shows that Cabo Verde came first followed by Nigeria, Uganda, Ghana and Kenya.

Regarding the POSV, it was observed that the value of POS transactions across the countries were significantly large, implying that POS usage was prioritized in the countries under review and were probably available for usage. Going by the correlation coefficients, it was found that POS was used the most in Cabo Verde followed by Uganda, Kenya, Ghana and Nigeria. This could be attributed to the population differences of those who require the use of ATM machines across the countries under review.
MBSV shows that the value of mobile banking services differed across the countries. The potency was highly seen in Kenya followed by Uganda, Ghana, Nigeria and Cabo Verde. This implies that mobile banking infrastructure may not have been well fitted in Cabo Verde when compared with Kenya, Uganda, Ghana and Nigeria.
Looking at NATM, it was observed that Ghana and Cabo Verde had more ATMs per 100,000 persons than Nigeria, Uganda and Kenya. This could be explained by the population differences of the countries. For instance, a highly populated country like Nigeria would require more ATMs than less populated countries like Ghana, Kenya, etc. NCOB shows that the number of commercial banks per 100,000 persons contributes more in Cabo Verde, Kenya and Uganda.

Discussion of findings

The findings of the fixed effects coefficients are summarized in equation 4.1 below.

$$\boldsymbol{HDI} = \mathbf{0.381735 - 0.006572ATM + 0.006119POS + 0.006677MBS - 0.000462NATM + 0.008538NCOB} \quad (4.1)$$

In line with the Fixed Effects output, there are divergent views on how digital financial services affect economic development. The results showed that some digital financial service platform like ATM turned out negative while POS and mobile transactions turned out positive. However, it is generally agreed that digitalization enhances financial transactions and the well-being of an economy but could be inhibited due to poor infrastructures, poor banking system, insecurity, etc. (Kouladoum *et al.*, 2022; Rosmah *et al.* 2020). Also, comparing the results with prior studies, the differences in the findings were associated with geography, methodology, date and variables used.
The findings showed that the volume of ATM transactions (ATM) had a negative and significant effect on HDI in SSA. The coefficient of ATM indicates that a percentage increase in the volume of ATM transactions resulted in approximately 0.66% decrease in HDI. This is not in tandem with the postulation of the technology acceptance theory which is constructed on the foundation that technology brings about efficient use and ease of financial transactions. This implies that the higher the ATM the lower economic development probably due to poor ATM services in terms of areas covered and the availability of services. Also, the incessant cases of ATM frauds such as card theft, PIN fraud, etc. could account for the low level of ATM transactions in Nigeria which is currently hindering economic development. Empirical studies such as Anane and Nie (2022); Mulungula and Nimubona (2022); Mahboub (2018) lend credence to the negative and significant effect of ATM on HDI, which is said could be due to high level of financial illiteracy, usage of ATM for menial transactions like purchases for consumption and lack of access to such digital payment platforms.
The POS turned out positive and statistically significant. The positive coefficient indicates that HDI increased by approximately 0.61% when POS usage increased by 1%. This shows that the usage of POS has helped economic development by improving HDI. This is in line with the Technology Acceptance Theory that increase in technology aids economic advancement. This can be attributed to the fact that POS machines are very portable and can be moved to rural areas with ease where other forms of digital services like ATMs are not available.
The positive and statistically significant coefficient of mobile banking volume entails that higher mobile banking volume triggers economic development. The coefficient implies that economic development (measured by HDI) increased by approximately 0.67% due to a percentage increase in mobile banking transaction. This is a clear indication that mobile banking transactions are very potent in improving HDI in SSA.
The positive and statistically insignificant coefficient of indicates that the number of ATMs (NATM) has a dismal effect on economic development in SSA. The statistically non-significant effect of NATM shows that the number of ATMs available only had a marginal effect on HDI. However, the positive coefficient of NATM shows that an increase in the number of ATM machines did not result in the expected level of economic development. This has been attributed to the situation where sufficient ATMs are distributed across a country with only few functioning optimally due to poor power supply and efficient management, hence people resort to cash delivery and lack of usage due to financial illiteracy (Mulungula& Nimubona, 2022; Anane & Nie, 2022; Saraswati *et al.*, 2019).

The coefficient shows that a percentage increase in NCOB resulted in an increase in HDI. The result indicates that the higher the number of commercial banks' (NCOB) the higher economic development. This implies that an increase in the number of commercial banks would help extend banking services to the unbanked through digital financial platforms. According to prior studies that lend credence to this finding, a plausible reason is the fact that commercial banks, when located in rural areas would mobilize savings and extend credit to small scale business people in the area (Ifediora *et al.*, 2022; Sawadogo & Semedo, 2021; Salah, 2021; Nyimbiri, 2021). Truly, the positive effect of NCOB was justified on the grounds that it provides a source of funding for productivity ventures among the rural populace. On the other hand, some studies have shown that commercial banks do not extend credit sufficient enough to drive rural productivity even when the number of branches increase (Amoah *et al.*, 2020; Ouechtati, 2020; Rosmah *et al.*, 2020).

CONCLUSION AND RECOMMENDATIONS

The study objectively examined the effect of digital financial services and financial inclusion on economic development in SSS from 2009 to 2020.The findings of the panel regression study based on the fixed effects model showed that:

1) The volume of ATM transactions has a negative and statistically significant effect on economic development in SSA.
2) The volume of POS transactions had a favourable and statistically significant effect on economic development in SSA.
3) The volume of mobile banking transactions has a statistically significant favourable effect on economic development in SSA.
4) The number of ATMs in the SSA nations studied has a negative and statistically insignificant impact on economic development.
5) In the selected SSA countries, the number of commercial banks had a favourable and statistically significant effect on economic development.

There is a paucity of studies investigating the effect of digital financial services, financial inclusion and economic development when the human capital development index (HDI) is used to quantify economic development. The few known studies are country specific, hence in order to econometrically investigate how digital financial services and financial inclusion affect economic development in SSA, this study employed World Bank panel data from 2009 to 2020 for five (5) SSA nations. The empirical findings of the study show that the components of digital financial services and financial inclusion (independent variables) explained nearly 96% of the overall fluctuations in HDI and were statistically. The study also found that there was a positive correlation between the volume of POS transactions, mobile banking transactions, and the number of commercial banks and financial inclusion which drives an increase in the level of economic development measured by HDI. Based on these findings, the study concluded that POS transactions, mobile banking transactions, and the number of commercial banks are powerful tools for driving economic development through digitalization in SSA, while there is room for improvement in the utilization and viability of ATMs. In summary, digital financial services which enhances financial inclusiveness represent a significant opportunity for SSA to achieve complete economic success, but this will require sustained effort and investment over the long term.
The study recommends that banks should ensure that ATMs provide convenience for customers by making them accessible and usable while also considering the rate charged for rendering such services.

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TALENT MANAGEMENT AND EMPLOYEES' PERFORMANCE IN TONIMAS NIGERIA LIMITED, ABIA STATE

Offurum, Anthony N., Kanu, Pamela A. and Onwuzuruike, Amarachi
Michael Okpara University of Agriculture, Umudike, Abia State
Corresponding author: anthoff12@gmail.com

ABSTRACT
The study focused on the influence of talent management on employees' performance in Tonimas Nigeria Limited, Abia State. The specific objectives of the study were to: ascertain the effect of talent acquisition on employees' task performance, evaluate the effect of career development on employees' contextual performance and determine the effect of talent retention on employees' adaptive performance in Tonimas Nigeria Limited.The study adopted survey research design. The study target population consisted of all the employees of Tonimas Nigeria Limited, Aba Plant, which was 598 employees. Taro Yamane's formula was used to determine the study sample size which stood at 240 respondents. Primary and secondary sources of data were used. Content validation was used to validate the research instrument and Cronbach Alpha reliability technique was used in testing the reliability of the study instrument. Self-administration of the study questionnaire was adopted. Random sampling techniques was used to sample the study respondents. Descriptive statistics was used to analyze the study specific objectives, while multiple regression analysis was used to test the hypotheses posited to guide the study. Findings revealed that,at 1% level (Sig < .01) of significance, talent acquisition had a positive and significant effect on employees' task performance. Also, at 1% level (Sig < .01) of significance, career development had a positive and significant effect on employees' contextual performance; and at 1% level (Sig < .01) of significance, talent retention had a positive and significant effect on employees' adaptive performance in Tonimas Nigeria Limited. The study concluded that talent management significantly affects employees' performance in Tonimas Nigeria Limited, Abia State. The study recommended, among other things, that the Management of Tonimas Nigeria Limited should sustain their talent acquisition programmes, improve on their comprehensive boarding prgrammes and sustain their services/career workshop, mentoring and coaching, job enrichment, training programmes and job rotation as part of their career development programmes. Also, Management needs to frame employee long-term career trajectory, assist employees maintain a clear career path and show employees recognition in multiple ways as part of their talent retention programmes. This will help to boost employees' adaptive performance and employees' overall performance in the organisation.
Keywords: Talent management, employee performance.

INTRODUCTION
Talent Management (TM) is *sine qua non* to employees' performance. TM is an important activity that enables organisations to have the right people with the skills and expertise to meet the organisation's immediate and future needs (Samiat, & Mordi, 2021). TM connote attracting the most skilled individuals in the right position that is, putting round pegs in round holes and developing them to enhance their potentials, thereby creating a sense of loyalty to the organisation and job satisfaction which drives employee performance. At the heart of TM is the simple idea of identifying high potential employees, training them well and placing them in influential positions where they can best impact on the organisation (Collings *et al*., 2017). The demand for top talent has continue to drive strategies that matches the global market context to create a sustainable organisational performance that matches its operational and strategic goals (Campbell & Smith, 2014).A successful business strategy consists of a methodology for improving its employee performance, through the recruitment of talent pool, setting a competitive compensation plan, training and developing talent (Riham & Tarik, 2020).
Talent management is premised on the fact that employees are now every organisation's most expensive and valuable assets, given that contemporary organisations are expected to do more with less resource. On the other hand, Talent management helps employees feel engaged, acquire skills that propelled them to work in the same direction with the organisation, which in turn, increases organisational performance. Employees are the force that drives Tonimas Nigeria Limited. Employees' performance in Tonimas Nigeria Limited are expected to improve with their TM programmes, as employee performance is of high relevance for the existence and wellbeing of the organisations. However, the influence of TM in detecting

the nature and extent of employees' performance by extension organisational performance is unambiguous (Abdullah *et al*., 2020). Good employee performance in Tonimas Nigeria Limited is based on a scientific background and practical qualification within the policies and procedures of work, employees' previous experiences, skills and abilities.

In Tonimas Nigeria Limited, TM programmes; talent acquisition, career development and talent retention are designed to spour eemployees performance (task performance, contextual performance and adaptive performance). However, the effectiveness of these talent management programmes in driving employees' performance in the organisation is a major concern to Tonimas Nigeria Limited. Therefore, the need for this empirical examination, to evaluate the effect of TM on employees' performance of Tonimas Nigeria Limited in order to enable the organisation management to strengthen their policy and practices of TM in order to achieve and sustain the laudable objectives of the organisation through outstanding employees' performance. Drawing from the above, the study- effects of TM on employee performance of Tonimas Nigeria Limited, was deemed imperative.

LITERATUREREVIEW

Talent management was defined as identifying, developing, and having high-potential employees who help the organisation achieve its goals. It encompasses a wide range of skills, including technological and managerial abilities. It is a set of operations aimed at attracting, selecting, developing, and retaining skilled and informed personnel (Abdel, *et al.,* 2021). Garrow and Hirsh (2018) opined that talent management is about doing things for your best people, investing in developing them, building their potential and assisting people to make the best use of their strengths.

Employee Performance

An employee performance is a system that consists of the processes used to identify, encourage, measure, evaluate, improve and reward employee performance (Ofili *et al.,* 2021). Employee performance is about how to create, control and measure a culture based on employees' performance, where the system control should ensure that the employer does the right things, not the things right (Ofili *et al.,* 2021). Rehman (2019), defines employee performance as the level to which the employees may apply the knowledge, skills and attitudes in order to achieve the desired results and meeting the specified objectives.

Dimensions of Employee Performance

Performance in the form of *task performance* comprises of job explicit behaviours which includes fundamental job responsibilities assigned as a part of job description. Task performance requires more cognitive ability and is primarily facilitated through task knowledge (requisite technical knowledge or principles to ensure job performance and having an ability to handle multiple assignments), task skill (application of technical knowledge to accomplish task successfully without much supervision), and task habits (an innate ability to respond to assigned jobs that either facilitate or impede the performance) (Conway, cited in Rabindra & Lalatendu, 2017).

An individual's ability to acclimatise and provide necessary support to the job profile in a dynamic work situation is referred to as *adaptive performance* (Hesketh, & Neal, cited in Rabindra & Lalatendu, 2017). Earlier studies have found that once the employees derive a certain amount of perfection in their assigned tasks, they try to adapt their attitude and behaviour to the varied requirements of their job roles (Pulakos *et al.,* cited in Rabindra & Lalatendu, 2017). An effective adaptive performance necessitates employees' ability to efficiently deal with volatile work circumstances, for example, technological transformations, changes in one's core job assignment, restructuring of organisation (Rabindra & Lalatendu, 2017).

Contextual performance is a kind of prosocial behaviour demonstrated by individuals in a work set-up. Such behaviours are expected of an employee but they are not overtly mentioned in one's job description. These kind of unstated expectations are called prosocial behaviour or extra role behaviour. Brief, and Motowidlo cited in Rabindra and Lalatendu, (2017), defined it as a behaviour that is: (i) accomplished by a member of an organisation, (ii) which is directed towards an individual, group, or organisation with whom the member interacts while carrying out his or her organisational role, and (iii) finally such behaviour is performed with the intention of encouraging the betterment of individual, group, or organisation towards which it is directed.

Talent Acquisition

Talent acquisition refers to the process of identifying and acquiring skilled workers to meet your organisational needs. The talentacquisition team is responsible for identifying, acquiring, assessing, and hiring candidates to fill open positions within a company. Employer branding, future resource planning, diversifying a company's labour force, and developing a robust candidate pipeline are the cornerstones of talent acquisition (Smart, 2019). Talent acquisition is an ongoing strategy to find specialists, leaders, or

future executives for your company. Talent acquisition tends to focus on long-term human resources planning and finding appropriate candidates for positions that require a very specific skill set (Jobvite, 2021).

Career Development

Career development involves concerted efforts directed towards assessing a workers' potentials identifying likely career paths for that employee and designing and implementing "various forms of training and experience to prepare that person for more advanced job". When a firm takes on career development as a human resource function, such activity is called career guidance, which is composed of three sub-processes or steps: forecasting, planning and counselling (Peterson & Tracey, 2011).

Talent Retention

Employee retention refers to capability of an organisation to keep its existing employees within the organisation. Talent retention can be influenced by performance-based compensation, training, hard work, motivation, career growth and giving benefits they need (El Dahshan *et al.,* 2018). Talent retention indicates the various methods and practices that facilitate employees to remain dedicated to a company for a long time (Balakrishnan & Vijayalakshmi, 2014; Farzana & Ekkra, 2022). Talent retention refers to an organization's capacity to hold its employees as long as their services are required.

Talent-Based Theory

Talent-based theory of the firm postulates that talent is the only resource that provides sustainable competitive advantage, and therefore, the firms attention and decision making should focus primarily on talent and the competitive capabilities derived from it (Roberts, 2008). The firm is considered being a talent integrating institution. Its role is neither the acquisition nor the creation of organisational talent; this is the role and prerequisite of the individual. Talent resides in and with individual persons; the firm merely integrates the individually owned talent by providing structural arrangements of co-ordination and co-operation of specialized talent workers. That is, the firm focuses on the organisational processes flowing through these structural arrangements, through which individuals engage in talent creation, storage, and deployment (Roberts, 2008).

METHODOLOGY

The study adopted survey design. Primary and secondary sources of data were used for the study. The study focused on talent management and employees performance in Tonimas Nigeria Limited. Thus, the researcher used well-structured questionnaire to elicit firsthand information from the employees in Tonimas Nigeria Limited, on how the talent management of their organisation has affected their performance. While the secondary source of data refers to already existing data gotten from books, journals, and from various unpublished work in the internet. The questionnaire used by the researcher in eliciting information are well-structured questionnaire of closed ended type designed in five (5) point Likert scale form (Strongly Agreed = SA, Agreed = A, Disagreed = D, and Strongly Disagreed = SD, Neutral = N). The close ended questionnaire has two to five options. The researcher adopted self-administration system of questionnaire administration. The researcher distributed the questionnaire to employees in Tonimas Nigeria Limited by hand, and returned after a period of one (1) week as agreed with the employees to collect the completed questionnaire.

The population of this study consists of all the employees Tonimas Nigeria Limited, Abia State. According to the survey undertaken by the researcher as at June 2023, Tonimas Nigeria Limited has a total of five hundred and ninety-eight (598) employees according to their Human Resource Manager. Thus, five hundred and ninety-eight (598) employees of Tonimas Nigeria Limited, were the target population of the study. Using Taro Yamane's (1964) formula at a normal confidence level of 95% and error tolerance of 5% the actual sample size of the study was deduced to be two hundred and forty employees (240). The researcher employed random sampling techniques in sampling the study respondents.

Content validation was used to validate the research instrument and Cronbach Alpha reliability technique was used in testing the reliability of the study instrument and the coefficient of correlation obtained was 8.0 and above showing the reliability of the study instrument. The study made use of descriptive statistics and inferential statistics. Description statistics which include table, mean, frequency and standard deviations were used to analyse all the objectives of the study from objective one to objective three. While the three hypotheses posited were tested using Multiple Regression Analysis with the aid of Statistical Packages for Social Science (SPSS) version 23. From the two hundred and forty (240) questionnaires distributed in Tonimas Nigeria Ltd, Abia State, two hundred and fifteen (215) questionnaires were returned completed which was used for the data analysis.

RESULTS AND DISCUSSION

Effect of Talent Acquisition on Employees' Task Performance in Tonimas Nigeria Limited

Table 1, showing descriptive statistics analysis result on the effect of talent acquisition on employees' task performance in Tonimas Nigeria Limited.

Variables	No	Mean	Std. Deviation	Remarks
Task Performance	208	4.54*	0.499	Agreed
Workforce planning	208	3.38*	0.595	Agreed
Use of Data Analytics	208	2.97	0.698	Disagreed
Sourcing and recruiting	208	3.23*	0.696	Agreed
Introduction of new technology	208	2.61	1.544	Disagreed
Comprehensive on boarding	208	3.07*	0.729	Agreed
Total Mean		**19.8**		
Grand Mean		**3.3**		
Benchmark Mean		**3.0**		

Source: Field survey 2023.
Key:* = Agreed.

The result in Table 1 above showed the descriptive statistics analysis result on the effects of talent acquisition on employees' task performance in Tonimas Nigeria Limited. The grand mean of ($\bar{x}$ 19.8) which is above the benchmark mean point of 3.0, showed that employees of Tonimas Nigeria Limited identified with the talent acquisition variables adopted in the organisation as the talent acquisition variables in the model are significant. However, of interest is the talent acquisition variables that scored above the benchmark mean point of 3.0 like: Workforce planning with the mean score of ($\bar{x}$ = 3.38), sourcing and recruiting with the mean score of ($\bar{x}$ = 3.23) and comprehensive on boarding with the mean score of ($\bar{x}$ = 3.07) are the major talent acquisition variables that the respondents agreed to be significantly affecting their task performance in the organisation. Nevertheless, the use of data analytics with the mean score of ($\bar{x}$ = 2.97) and introduction of new technology with the mean score of ($\bar{x}$ = 2.61), which is below the benchmark mean point of 3.0 was disagreed by the respondents as significantly affecting their task performance in the organisation.

Effects ofCareer Development on Employees' Contextual Performance in Tonimas Nigeria Limited

Table 2, showing the descriptive statistics result on the effects of career development on employees' contextual performance in Tonimas Nigeria Limited.

Variables	No	Mean	Std. Deviation	Remarks
Career information services/career workshop	208	4.48*	0.501	Agreed
Mentoring and coaching	208	3.32*	0.586	Agreed
Mentoring	208	2.75	0.562	Disagreed
Job enrichment	208	2.93	0.715	Disagreed
Training programmes	208	2.63	0.731	Disagreed
Job rotation	208	3.29*	0.662	Agreed
Total Mean		**19.4**		
Grand Mean		**3.2**		
Benchmark Mean		**3.0**		

Source: Field survey 2023.
Key:* = Agreed.

The result in Table 2, above showed the descriptive statistics result on the effects career development on employees' contextual performance in Tonimas Nigeria Limited. The grand mean of ($\bar{x}$ 3.2) which is above the benchmark mean point of 3.0, revealed that Tonimas Nigeria Limited identified with the career development variables adopted by the organisation. However, of interest is the variables that scored above the benchmark mean point of 3.0 like: Mentoring and coaching with the mean score of ($\bar{x}$ = 3.30) and job rotation with the mean score of ($\bar{x}$ = 3.02) are the major career development variables that are significantly affecting employees' contextual performance in the organisation. Nevertheless, mentoring, job enrichment and training programmes with the mean score of ($\bar{x}$ = 2.75, 2.93 and 2.63) respectively, which falls below the benchmark mean point of 3.0, revealed that they do not significantly affects employees contextual performance in the organisation.

Effects ofTalent Retention on Employees' Adaptive Performance in Tonimas Nigeria Limited

Table 3, showing the descriptive statistics result on the effect of talent retention on employees' adaptive performance in Tonimas Nigeria Limited.

Variables	No	Mean	Std. Deviation	Remarks
Adaptive Performance	208	4.60*	0.492	Agreed
Better recruiting from the beginning	208	3.42*	0.494	Agreed
Training to foster retention	208	3.25*	0.665	Agreed
Showing recognition in multiple ways	208	2.77	0.880	Disagreed
Frame the long-term career trajectory	208	1.98	1.369	Disagreed
A clear career path	208	3.20*	0.569	Agreed
Total Mean		**19.2**		
Grand Mean		**3.2**		
Benchmark Mean		**3.0**		

Source: Field survey 2023

Key:* = Agreed.

The result in Table 3 above showed the descriptive statistics result on the effects of talent retention on employees' adaptive performance in Tonimas Nigeria Limited. The grand mean of ($\bar{x}$ 3.2) which is above the benchmark mean point of 3.0, revealed that the majority talent retention variables adopted in Tonimas Nigeria Limited are identified with the employees of the organisation. However, of interest is the variables that scored above the benchmark mean point of 3.0 like: Better recruiting from the beginning with the mean score of ($\bar{x}$ = 3.42), training to foster retention with the mean score of ($\bar{x}$ = 3.25) and a clear career path with the mean score of ($\bar{x}$ = 3.20), are the major talent retention variables that the respondents agreed to be significantly affecting their adaptive performance in the organisation. Nevertheless, showing recognition in multiple ways and framing the long-term career trajectory with the mean score of ($\bar{x}$ = 2.77 and 1.98) respectively which is below the benchmark mean point of 3.0 was disagreed by the respondents as significantly affecting their adaptive performance in the organisation.

Hypothesis one

Talent acquisition does not have any significant effect on employees' task performance in Tonimas Nigeria Limited.

Table 4, showing Multiple Regression analysis result on the effects of effect of talent acquisition on employees' task performance in Tonimas Nigeria Limited.

	Unstandardized Coefficients		Standardized Coefficients		
Variables	B	Std. Error	Beta	t	Sig.
(Constant)	1.876	0.095		19.849	0.000***
Workforce planning	0.408	0.034	0.486	11.899	0.000***
Use of data analytics	0.197	0.031	0.275	6.393	0.000***
Sourcing and recruiting	0.226	0.032	0.315	6.996	0.000***
Introduction of new technology	0.028	0.011	0.085	2.600	0.010***
Comprehensive on boarding	-0.031	0.033	-0.046	-0.946	0.345
R^2		**80.6%**			
$\bar{R}^2$		**80.1%**			
F-Statistics		**168.014**			

Source: Field Survey 2023.

***Keys:** *** = Significant at 1% level, ** = Significant at 5% level, * = Significant at 10% level.

The result in Table 4, above, showed the effects of talent acquisition on employees' task performance in Tonimas Nigeria Limited. The result revealed that: Workforce planning with the regression coefficient of (0.408), use of data analytics with the regression coefficient of (0.197), sourcing and recruiting with the regression coefficient of (0.226) and introduction of new technology with the regression coefficient of (0.028) are the talent acquisition of Tonimas Nigeria Limited are significant and positively affecting employees' task performance in the organisation at 1% level (Sig < .01) of significance. However, comprehensive on boarding with the regression coefficient of (-0.031) which are part of the talent acquisition components in the organisation is negative and not significantly affecting employees task performance in Tonimas Nigeria Limited. Nevertheless, the result revealed that: Workforce planning, use

of data analytics, sourcing and recruiting and introduction of new technology significantly and positively affects employees' task performance. Thus, at 1% level (Sig < .01) of significance, talent acquisition have a positive and significant effects on employees' task performance inTonimas Nigeria Limited.

The R- square which shows the proportion of variation in the dependent variable that can be explained by the independent variables revealed that 80.6% of the total variation in employees' task performance inTonimas Nigeria Limited was explained by the variation in workforce planning, use of data analytics, sourcing and recruiting and introduction of new technology. While the Adjusted R explains the effect of decrease in the degree of freedom arising from the various independent variables. The F-statistics (168.014) is significant at 1% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Based on the above results in Table 4, which revealed that at 1% level (Sig < .01) of significance, talent acquisition have a positive and significant effects on employees' task performance inTonimas Nigeria Limited, the researcher rejected the null hypothesis which states: "Talent acquisition does not have any significant effect on employees' task performance in Tonimas Nigeria Limited" and accepted the alternate hypothesis which states: "Talent acquisition have any significant effect on employees' task performance in Tonimas Nigeria Limited."

Career development have no significant effect on employees' contextual performance in Tonimas Nigeria Limited.

Table 5, showing Multiple Regression analysis result on the effects ofcareer development on employees' contextual performance in Tonimas Nigeria Limited.

	Unstandardized Coefficients		**Standardized Coefficients**		
Variable	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.664	0.080		20.676	0.000***
Career information services/career workshop	0.270	0.029	0.316	9.204	0.000***
Mentoring and Coaching	0.218	0.026	0.245	8.542	0.000***
Job Enrichment	0.126	0.027	0.180	4.692	0.000***
Training Programmes	0.127	0.030	0.185	4.226	0.000***
Job Rotation	0.188	0.028	0.248	6.682	0.000***
R^2		**88.3%**			
$\bar{R}^2$		**88.1%**			
F-Statistics		**306.231**			

Source: Field Survey 2023.

***Keys:** *** = Significant at 1% level, ** = Significant at 5% level, * = Significant at 10% level.

The result in Table 5 above, showed the effects of career development on employees' contextual performance in Tonimas Nigeria Limited. The result revealed that: Career information services/career workshop with the regression coefficient of (0.270), mentoring and coaching with the regression coefficient of (0.218), job enrichment with the regression coefficient of (0.126), training programmes with the regression coefficient of (0.127) and job rotation with the regression coefficient of (0.188) are the career development variables of Tonimas Nigeria Limited that are significant and positively affecting employees' contextual performance in the organisation at 1% level (Sig < .01) of significance. The result signified that career information services/career workshop, mentoring and coaching, job enrichment, training programmes and job rotation significantly and positively affects employees' contextual performance in the organisation. Thus, at 1% level (Sig < .01) of significance, career developmenthas a positive and significant effects on employees' contextual performance in Tonimas Nigeria Limited.

The R- square which shows the proportion of variation in the dependent variable that can be explained by the independent variables revealed that 88.1% of the total variation in employees' contextual performance in Tonimas Nigeria Limited was explained by the variation in career information services/career workshop, mentoring and coaching, job enrichment, training programmes and job rotation. While the Adjusted R explains the effect of decrease in the degree of freedom arising from the various independent variables. The F-statistics (306.231) is significant at 1% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Based on the above results in Table 5, which revealed that at 1% level (Sig < .01) of significance, career developmenthas a positive and significant effects on employees' contextual performance inTonimas

Nigeria Limited, the researcher rejected the null hypothesis which states: "Career development have no significant effect on employees' contextual performance in Tonimas Nigeria Limited" and accepted the alternate hypothesis which states: "Career development have significant effect on employees' contextual performance in Tonimas Nigeria Limited."

Talent retention have no significant effect on employees' adaptive performance in Tonimas Nigeria Limited.

Table 6, showing Multiple Regression analysis result on the effects of talent retention on employees' adaptive performance in Tonimas Nigeria Limited.

	Unstandardized Coefficients		Standardized Coefficients		
Variables	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.968	0.138		14.232	0.000***
Better recruiting from the beginning	0.360	0.053	0.362	6.821	0.000***
Training to foster retention	0.312	0.030	0.421	10.440	0.000***
Showing recognition in multiple ways	0.184	0.031	0.329	5.991	0.000***
Frame the long-term career trajectory	-0.016	0.013	-0.044	-1.209	0.228
A clear career path	-0.029	0.051	-0.034	-.575	0.566
R^2		**75.2%**			
$\bar{R}^2$		**74.6%**			
F-Statistics		**122.543**			

Source: Field Survey 2023.

***Keys:** *** = Significant at 1% level, ** = Significant at 5% level, * = Significant at 10% level.

The result in Table 6 above, showed the effects of talent retention on employees' adaptive performance in Tonimas Nigeria Limited. The result revealed that: Better recruiting from the beginning with the regression coefficient of (0.360), training to foster retention with the regression coefficient of (0.312) and showing recognition in multiple ways with the regression coefficient of (0.184) are the talent retention of Tonimas Nigeria Limited that are significant and positively affecting employees' adaptive performance in the organisation at 1% level (Sig < .01) of significance. However, frame the long-term career trajectory with the regression coefficient of (-0.016) and a clear career path which is part of the talent retention components in the organisation is negative and not significantly affecting employees adaptive performance in Tonimas Nigeria Limited. Nevertheless, the result revealed that better recruiting from the beginning, training to foster retention and showing recognition in multiple ways significantly and positively affects employees' adaptive performance in the organisation. Therefore, at 1% level (Sig < .01) of significance, talent retention have a positive and significant effects on employees' adaptive performance inTonimas Nigeria Limited.

The R- square which shows the proportion of variation in the dependent variable that can be explained by the independent variables revealed that 75.2% of the total variation in employees' adaptive performance ininTonimas Nigeria Limited was explained by the variation in better recruiting from the beginning, training to foster retention and showing recognition in multiple ways. While the Adjusted R explains the effect of decrease in the degree of freedom arising from the various independent variables. The F-statistics (122.543) is significant at 1% level, which shows the overall significance of the entire model. Therefore, the independent variables in the model were significant in explaining the change in the dependent variable.

Based on the above results in Table 6, which revealed that at 1% level (Sig < .01) of significance, talent retention have a positive and significant effects on employees' adaptive performance inTonimas Nigeria Limited, the researcher rejected the null hypothesis which states: "Talent retention have no significant effect on employees' adaptive performance in Tonimas Nigeria Limited" and accepted the alternate hypothesis which states: "Talent retention have significant effect on employees' adaptive performance in Tonimas Nigeria Limited."

CONCLUSION AND RECOMMENDATION

Based on the study findings, the researcher concluded that talent management positively and significantly affects employee performance in Tonimas Nigeria Limited, Abia State. And recommends that:

i. The Management of Tonimas Nigeria Limited need to sustain their talent acquisition programmes especially; Workforce planning, use of data analytics, sourcing, recruiting and introduction of new technology as these variables of workforce planning are positive and significantly affecting their employees task performance. However, Management needs to work on improving on their

comprehensive on boarding prgrammes as it has a negative effect on employees' task performance. This will ensure that employees are successfully beginning their journey down the path of personal development, professional growth and success which will boost their task performance in the organisation.

ii. The Management of Tonimas Nigeria Limited need to sustain their career development programmes, especially; acquitting employees with career information, services/career workshop, mentoring and coaching, job enrichment, training programmes and job rotation as all these programmes are positive and significantly affecting employees contextual performance in the organisation. Thus, the organisation is doing well in career development. However, Management needs to continue to enroll their employees in organisational career development programmes as it will continue to boost their contextual performance.

iii. The Management of Tonimas Nigeria Limited need to sustain their talent retention programmes, especially; embarking in better recruiting from the beginning, training to foster retention and showing recognition in multiple ways as these talent retention programmes are positive and significantly affecting their employees adaptive performance. However, framing the long-term career trajectory and assisting employees maintain a clear career path which are among the talent retention programmes of the organisation are negatively affecting employees' adaptive performance in the organisation. Thus, Management needs to work on it by defining job positions and identify employees' training need, these will help to boost their adaptive performance in the organisation.

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SUB THEME

RE-IMAGINING BUSINESS FOR ENDOGENOUS AFRICAN BUSINESS IN THE 4TH INDUSTRIAL REVOLUTION ERA

EFFECT OF INFLATION ON SURVIVAL OF SMALL BUSINESSES IN ABIA STATE, NIGERIA

[1]Dibie,Victor M., [1]Okoro, Chinonso C., [2]Ahamefula, Chinwe J. and [3]Uchendu Barnabas O.
[1]Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.
[2]Abia State Polytechnic Aba, Abia State, Nigeria.
[3]National Open University of Nigeria, Umudike Study Centre, Abia State, Nigeria.
Corresponding author: v.dibie@gmail.com

ABSTRACT
The study focused on effect of inflation on survival of small businesses in Abia State, Nigeria. The specific objectives of the study wereto; examine the effect of increasing purchasing costs on the survival of small businesses in Abia State; measure the effect of increasing production costs on the survival of small businesses in Abia Stat; determine the effect of increasing wage costs on the survival of small businesses in Abia State and assess the effect of increasing maintenance costs on the survival of small businesses in Abia State, Nigeria. To achieve the objectives of the study survey research design was adopted. Primary data was generated through the use of questionnaire. The population of the study was made up of 100 small business owners in Abia State. Data was analyzed using multiple regression analysis. The first hypothesis revealed that increasing purchasing costs significantly affect the survival of small businesses in Abia State. The second hypothesis revealed that increasing production costs significantly affect the survival of small businesses in Abia State. The third hypothesis revealed that increasing wage costs significantly affect the survival of small businesses in Abia State. The final hypothesis revealed increasing maintenance costs significantly affect the survival of small businesses in Abia State, Nigeria. The study recommended hat government should ensure that up to date policy reforms are always in place to replace the outdated ones to enable the economy as a whole and small businesses in particular to meet up with the ongoing financial globalization. The study also recommended that there should be a frantic effect or to increase the expansionary policy mechanism as a tool to checkmate inflationary effects on business survival among other recommendations.
Keywords: Inflation, Survival, Small businesses, Abia, Nigeria

INTRODUCTION
Achieving high economic growth and halting or significantly decreasing the trend of inflation are the main objectives of microeconomic policies in both developed and developing countries, according to a large consensus among economists, central bankers, policy makers, and credit administrators. This is the outcome of the high rates of inflation that are burdening many emerging countries and impeding a market economy's ability to function effectively (Krugman, 1995). Individuals on fixed incomes are particularly negatively impacted by inflation, which also helps borrowers at the expense of creditors.

In most economies, inflation is still a frequent occurrence. Inflation is defined as an increase in the average level of prices for goods and services within an economy over a given period of time. A rise in the overall price level results in a decrease in the purchasing power of each unit of money. As a result of the internal medium of exchange and unit of account inside the economy losing real value, inflation also represents the degradation of the buying power of money (Bortis, 2004). An economy can experience a range of repercussions from inflation, both beneficial and harmful at the same time. Increased opportunity costs associated with holding money, lack of confidence in future inflation that could deter savings and investment, and shortages of goods if inflation picks up speed enough to cause consumers to start hoarding goods out of fear that prices will rise in the future are all negative effects of inflation. Benefits include ensuring that central banks have the power to adjust real interest rates and encouraging investment in non-monetary capital projects, according to McCallum (1987). Inflation basically reduces the purchasing power of a country's currency. Low to moderate levels of inflation in a country might be advantageous to the SME company sector since they can boost output. On the other hand, excessive inflation can hurt a business's bottom line by driving up the cost of inputs and ultimately decreasing the market for its products (Meyers, 2011). Ultimately, the degree of competition a company confronts and the nature of its operations determine how exposed it is to inflation. A business may be able to survive the negative impacts of inflation if its product demand is inelastic by passing price increases through to final consumers while keeping a profit margin. This assertion may also be made by a company that works in a market with limited rivalry (Meyers, 2011). Myers and Steward (2014) suggest that inflation is detrimental to lenders

while generally beneficial to borrowers. This is because inflation is likely to cause any existing financial claims to lose value relative to their nominal value, thereby resulting in receivables with a lower real worth. While struggling small businesses might not wish to follow a development strategy, Platt (2015) asserts that there are other forces at work. For instance, Nigeria has had protracted economic struggles characterized by elevated inflation rates.

The importance of Small and Medium-Sized Enterprises (SMEs) to the nation's economy cannot be overstated. Government attention to these firms has increased recently, particularly in third-world countries. This is partly because of growing discontent with the results of development plans that gave priority to expensive, large-scale, heavily import-dependent industrial units. Small and medium-sized enterprises (SMEs) have an impact in a number of ways, including job creation, more efficient use of local resources, support for rural development, entrepreneurship, mobilization of local savings, connections with larger industries, promotion of regional balance through more equitable investment distribution, opportunities for self-employment, and training of managers and semi-skilled workers. Most developed and developing countries rely on the dynamism, creativity, and risk-taking of small and medium-sized enterprises to initiate and sustain economic growth. Small and medium-sized enterprises are crucial to the growth of the economy as a whole. Small and medium-sized enterprises foster competition and entrepreneurship, which benefits the economy's overall efficiency and productivity growth. At this point, the focus is on how the government may assist and even get involved in taking advantage of the social advantages that increased competition and entrepreneurship bring to a nation. Second, proponents of SMEs frequently assert that they are more productive than big small firms; nevertheless, they may also contribute to economic growth and development through direct government financial assistance, institutional reforms in the financial market, and other means.

According to Yaniv-Konchitchki (2011), inflationary pressures that are not reflected in nominal financial accounts would nevertheless have an effect on the economy, even during a period of comparatively low inflation. The type of information that managers need to evaluate how inflation affects planning, budgeting, control, profitability, and shareholders' money has been emphasized by Lund (1974).

Some argued that the growth of SMEs creates jobs more than the expansion of major companies since borrowing money becomes more expensive due to a weak currency and high interest rates, discouraging investment and making the import of raw materials difficult and expensive. Despite the importance of small and medium-sized enterprises (SMEs) to Nigeria, their growth has been impeded by their restricted access to both government and informal financing. Badly managed financial institutions have the potential to seriously undermine a country's microeconomic underpinnings, which will obstruct the growth of revenue and employment. For instance, the baseline economic assessment of Small and Medium Industries (SMI) in Nigeria in 2004 discovered that the 6,498 industries evaluated employed just over a million people, despite the fact that 18.5 million Nigerians are jobless.

To fully benefit from Nigeria's economic success, the disinvestment of stakeholders should be reduced, as high interest rates and inflation make investment costly. Examining the relationship between inflation and SME productivity is crucial in light of the current economic conditions, which include a high unemployment rate, business closures, sluggish economic development, and declining living standards. Additionally, policies that encourage SME growth should be put in place.

Although SMEs are often seen as the foundation of most economies for the generation of employment and technical innovation, their influence on Nigeria's economic development and growth has been negligible. This necessitates an empirical examination of the different growth-inhibiting and growth-promoting SMEs in Nigeria. Nonetheless, scholars have recently examined economic development and growth, as well as the factors that drive it, from a range of perspectives and literary works.

The decline of infrastructure and subsector funding sources is another major obstacle preventing SMEs in Nigeria from expanding. Businesses typically struggle to get financial options, particularly those offered by banks. This incident has compelled several businesses to investigate other financing solutions with higher interest rates and other consequences. The Nigerian Central Bank responded by offering the government many ways to finance SMEs. They include direct loans from state governments, microfinance organizations, and the Micro, Small, and Medium Scale Development Fund (MSMSDF), among many other financial options. In a short amount of time, it has led to a discernible improvement in their actions (Jibir, 2015). Most problems that small businesses face are linked, either directly or indirectly, to inflation. All operations, even commercial ones, have been significantly impeded by the rapid spike in inflation that the country is currently experiencing. Therefore, inflation is the major challenge that small businesses are facing in Nigeria as a whole and in Abia State in particular. It is against this background that this study aimed to examine the effect of inflation on survival of small businesses in Abia State, Nigeria. Thus, the

study intends to answer the following research questions: What is the effect of increasing purchasing costs on the survival of small businesses in Abia State, Nigeria? To what extent does increasing production cost affect the survival of small businesses in AbiaState, Nigeria? To what extent do increasing wage costs affect the survival of small businesses in Abia State, Nigeria? What is the effect of increasing maintenance costs on the survival of small businesses in Abia State, Nigeria?

REVIEW OF RELATED LITERATURE

Concept of inflation

Economic factors have a direct impact on the potential attractiveness of different strategies and consumption patterns in the economy. These factors also have significant and varying effects on organizations across different industries and geographical areas. Interest rates, foreign exchange rates, inflation, and the monetary and fiscal policies of the government are examples of economic variables. These elements influence consumers' desire to purchase goods and services, which influences the number of new SMEs that open for business (Ehlers & Lazenby, 2007).

Anyanwu (1993) asserts that an excess of demand for commodities across the board in the economy leads to inflation. This implies that the majority of the money is being spent on goods that are produced domestically, which is something that can be accomplished in the long run given the available production resources. Inflation arises when the economy's supply of goods and services is unable to meet demand (Hill, 1982). The reasons for it might be production deficits or overspending by the public and private sectors. Price increases might also be the result of rising production costs. For instance, inflation might occur if the price increases of imported raw materials are not restrained.

However, there are a number of ways that inflation affects economic growth, and older people on fixed incomes can be particularly affected. The rising costs of goods and services mean that these folks cannot buy as much as they used to. This deters savers and slows down economic growth since the economy needs savings to sustain investment, which boosts economic growth. Businesses would also be unable to predict the demand for their goods as they would have to raise prices to cover their expenses. This would make it difficult to plan ahead for what to create, where to manufacture, and for whom to produce due to the high cost of capital. It also breeds uncertainty over interest rates, future pricing, and exchange rates, increasing the risks for potential trading partners and discouraging trade. Inflation affects investments both directly and indirectly. It increases transaction costs, which directly obstructs economic expansion. For instance, when nominal value is unknown due to inflation, investment planning becomes difficult. In situations when inflation is erratic and relative pricing are uncertain, individuals can be reluctant to sign contracts. This reluctance to sign contracts will eventually deter investment, which will hinder economic growth. Inflation in this case will deter investment and might lead to the collapse of the financial system (Hellerstein, 1997).

Long-term growth and the general health of the financial system are negatively impacted by prolonged inflation. Growing inflation results in lower actual returns on all assets, not just cash. These low returns impair the flow of capital and the efficiency of the financial system. Low real returns have a significant detrimental effect on the lending market. As a result, less credit is available to finance capital investment, which is detrimental to the economy (Blume, 1978). This implies that inflation affects investment in a number of ways, the primary one being that it impedes economic expansion. The primary source of inflation is the money supply. Investors want to be able to predict returns while making financial decisions. People who don't trust money are less likely to engage in business connections. This leads to lower investment, lower production, and fewer positive social relationships. People might attempt, among other things, to trade using less efficient techniques in order to avoid the unstable price levels caused by inflation.

Concept of Small Businesses

The literature lacks precise and generally accepted definitions of small-scale businesses. This may be due to the fact that categorizing firms requires an evaluation that is both quantitative and subjective (Ekpenyong, 1992). The concept of small-scale enterprises (SMEs) is one that is still developing in the management and economics domains. This is primarily because of the different responsibilities that SMEs are expected to play in each economy's process of growth and development. These conceptual meanings also alter over time due to changes in price level and other macroeconomic variables as well as technological advancements. Some of the criteria that are commonly used to define small scale include the number of employees, the size of the business, the amount of cash required, and the ownership structure (Oshaghemi, 1999).

People, organizations, and governments have defined small and medium-sized businesses based on different conceptual frameworks that are tailored to certain situations. Prior to 1992, modifications to their

development plan led to the federal government of Nigeria and its agencies adopting several definitions at different periods. According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), these companies are those with total investments between 100,000 and 2 million naira, including working capital but excluding land. In contrast, SMEs were defined in 1989 as businesses whose fixed assets, excluding land, but including project expenses, do not exceed N10 million by the order establishing the National Economic and Reconstruction Fund (NERFUND).However, these categories were unified by the National Council on Industry in 1992, and since then, businesses categorized as small scale enterprises (SSEs) have been defined as those with fixed assets between N1 million and N10 million. In 1996, these parameters were revised to cover companies whose total costs, including working capital but excluding land costs, are over N1 million but not over N40 million. Along with these descriptors, some or all of the following characteristics can be used to identify SMEs:

- The use of manufactured technology or labor-intensive production methods;
- The division of ownership and management, which leads to the management structure being the basis for policy choices;
- The presence of official relationships between employers and employees;
- Lack of access to finance is a major obstacle to growth,
- Increased reliance on domestic resources that lead to low import content in capital and raw material inputs.
- They are widely distributed across important economic sectors, particularly manufacturing, transportation, and communication etc.

Effects of inflation on small businesses

Inflation does serious damage to business. It hinders productivity growth, results in wasteful resource consumption, depresses company valuations, and plants the seeds for future recessions. To lessen the negative effects of inflation, businesses must assess the risk that inflation poses to their operations, obtain a complete understanding of their true costs and prices, and create plans to defend their investment programs and gross margins (Ulrich *et al.*, 2010).

In general, inflation has both positive and negative effects on small businesses. Conversely, small companies would like modest and consistent inflation. A high rate of inflation might raise the cost of production.Some of the costs connected with inflation for small businesses include menu pricing, international competitiveness, pay inflation, and misunderstandings and uncertainty (Pettinger, 2016). However, inflation may also work in small businesses' favor in some instances, since it reduces the real worth of their debt. On the other hand, moderate inflation carried on by strong economic growth promotes demand-pull inflation. Increasing inflation enables small businesses to increase their pricing, hence increasing their profitability.

The link between the two has shown that inflation has had a substantial impact on the performance of small businesses in Nigeria. Examination was given to the banks' representation of the business entities under inquiry. The banks' reported profit, return on equity (ROE), and earnings per share (EPS) were utilized as performance metrics to assess the strength of the correlation between profitability and inflation. When compared to return on equity, a measure used to evaluate the profitability of commercial banks in Nigeria, the results show no appreciable positive link between reported profit and inflation (Oleka, 2015).

The evidence from Pakistan does not align with the data originating from Nigeria. In a 2015 research, Nizam Ud Din and Zuhaib Zulfiqar looked at the effects of macroeconomic variables on the success of Pakistan's textile sector. Inflation is one of the macroeconomic variables under investigation. This study used the return on equity (ROE) and return on asset (ROA) of fifty different small textile companies that were listed on the Karachi Stock Exchange as indicators of the profitability of the small enterprises. The study's findings show that while inflation positively insignificantly impacts return on equity (ROE), it significantly and favorably influences return on assets (ROA).

Theoretical Framework

Theories on Inflation

Inflation, as used in economic terminology, is the steady rise in the average price of goods and services within an economy. A given amount of money may buy fewer goods and services when the general price level rises. As the commonly believed saying "inflation is too much money chasing too few goods" indicates, money and inflation are inexorably linked. Anyanwu (1993) asserts that an excess of demand for commodities across the board in the economy leads to inflation. This implies that the majority of the money is being spent on goods that are produced domestically, which might eventually be possible given the available manufacturing resources. The inflation rate is determined by calculating the percentage

change in the price index (consumer, wholesale, producer, etc.). Essien (2002) states that the consumer price index (CPI) is a measure of the typical consumer's cost of purchasing a representative basket of goods and services that is produced from a quarterly survey of consumer prices. Due to variations in the weights of the consumer basket, changes in the price of specific goods and services can impact inflation records to varying degrees.

Many economic theories have been developed using various schools of thought to explain why inflation occurs. The classical school of thought put out the Quantity Theory of Money to explain how fluctuations in the amount of money in circulation eventually lead to adjustments in the general level of prices. The quantity theory of money formed the core of 19th-century classical monetary analysis, served as the primary conceptual framework for interpreting current financial events, and served as the intellectual foundation of conventional policy prescriptions aimed to maintain the gold standard. David Hume (1711–1776) provided the first dynamic process explanation of how a change in money moved from one economic sector to another, altering relative price and quantity along the way. He vastly develops, broadens, and improves the Quantity Theory of Money. The most well-known formula for the Quantity Theory of Money, MV = PT, was developed by Irving Fisher. The letters M, V, P, and T in this equation stand for money supply, velocity of circulation, price level, and transaction or output, respectively. The monetary effect on inflation was further supported by the Neo-Classical school of thought known as the monetarists, which was led by Professor Milton Friedman. They contend that since "only money matters," monetary policy is a more useful instrument for stabilizing the economy than fiscal policy. Monetarists contend that the money supply is the "dominant, though not exclusive" factor influencing both the short-term and long-term levels of production and prices (Case and Fair, 2014)

Empirical Review

Additionally, Bekeris (2012) found that when examining the impact of macroeconomic factors on the profitability of SMEs, there was a substantial inverse relationship between inflation and SMEs' profitability. He found that there was a substantial correlation between rises in inflation and the profitability of SMEs.

On the other hand, Attaria and Javed (2013) used time series data spanning the years 1980–2010 to demonstrate that while there was a long-term correlation between inflation and economic growth, there was no correlation between inflation and SMEs. Furthermore, while analyzing the relationship between inflation and the growth of SMEs, Ajagbe (2012) discovered a significant direct positive link between SMEs' productivity development and inflation in one state of Nigeria. Again, the most significant kind of inflation is the cause of the differences in the different outcomes. SMEs benefit when cost-push inflation is less than demand-pull inflation, while the opposite would be detrimental to SMEs.

Owolabi (2017) examined the connection between the financial performance and economic characteristics of a selection of small and medium-sized enterprises in Nigeria. This study examined how government expenditure, inflation, interest rates, and changes in exchange rates, as well as other economic elements of the operating environment, impacted the financial performance of a sample of small and medium-sized firms. The study employed an ex-post facto research design. Thirty-one Nigerian small and medium-sized enterprises were selected using a combination of stratified and random selection procedures. Regression analysis was used in the research to examine the suggested hypotheses. The financial performance of small and medium-sized enterprises was negatively and significantly correlated with the economic characteristics measured by the interest rate, inflation rate, exchange rate, and government spending. The results indicated that economic characteristics did, in fact, have an impact on a firm's financial performance, albeit to varying degrees. Furthermore, it was demonstrated that economic issues in general have a considerable negative influence on the performance of small and medium-sized firms.

Abubakar (2015) examined how the Kano and Sokoto states' SSBs' performance was impacted by the economy. A variety of queries were posed to the sampling SSBs. The data were examined using multivariate discriminant analysis and multiple regression technique to assess the degree of performance and ascertain the significance of the correlation. The research's conclusions unambiguously show that SSB performance in the states of Kano and Sokoto is greatly impacted by economic circumstances, and that SSB performance is low during the study period. The paper suggests that the government create an environment that is beneficial to small and medium-sized banks (SSBs) by enacting regulations that promote the sector, providing enough infrastructure, and giving capital.

Nagaya (2017) looks at the relationship between SMEs and economic growth using data from India and finds that two ways that SMEs' activities contribute to growth are through employment and poverty alleviation. Comparable findings are found by Aremu and Adeyemi (2011), showing that SMEs are essential for creating job opportunities and reducing poverty.

A separate study conducted in 2005 for a sample of 45 countries by Beck, Dunt, and Levine shows a strong positive correlation between the activities of SMEs and increase in output. This implies that SMEs are crucial instruments for promoting advancement and growth. SMEs, inequality, and poverty, however, don't seem to be connected. Taiwo *et al.* (2012) discovered a strong link between the economic performance of Nigeria and the activities of SMEs in their study on how SMEs help the country's economic growth. Furthermore, the study found that small and medium-sized businesses (SMEs) in Nigeria face several challenges that have a negative impact on their operations, including a lack of funding, high levels of corruption, and inadequate training and capacity building. Moreover, Chinweuba and Sunday (2015) investigate the relationship between SMEs and Nigeria's economic growth. Their findings demonstrate how SMEs' activities foster growth by boosting output and utilizing other inventive survival techniques. Similarly, Motilewa *et al.* (2015) found that Nigeria's economic development is mostly driven by SMEs. They go on to say that these companies deal with a number of challenges, such as fiscal constraints and managerial issues. In a different study on Pakistan's economy, Nalini *et al.* (2016) note that SMEs are crucial to exporting products and generating job possibilities.

Using time series data, Vijayakumar (2013) discovers a minimal association between SMEs and the growth and development of the Sri Lankan economy. Furthermore, Olukayode and Somoye (2013) investigate the impact of financing on the expansion of entrepreneurship in Nigeria using an endogenous growth paradigm. According to their results, finance, interest rates, real gross domestic product, unemployment, and industrial productivity all have a big influence on entrepreneurship in Nigeria.

The impact of financing for SMEs on Nigeria's economic growth between 1980 and 2010 is evaluated by Afolabi (2013). The ordinary least square (OLS) method was used to estimate the multiple regression models in the investigation. The study demonstrates that the output of the wholesale and retail trade serves as a good proxy for the production of SMEs in the gross domestic product and that lending by commercial banks to SMEs has a significant positive impact on economic growth. Furthermore, Onakoya *et al.* (2013) examine the impact of assisting small-scale businesses on economic growth by utilizing OLS to evaluate quarterly time series data from 1992 to 2009. The result shows that supporting small company owners with loans enhances economic performance.

Kadiri (2012) looks into the role that small and medium-sized enterprises (SMEs) have in generating employment in Nigeria. The binomial logistic regression analysis was one of the statistical analysis techniques employed. The results show that SMEs have not had a major impact on economic growth, partly due to insufficient government investment and dedication. Iyigun and Owen (1998) found a negative relationship between the proportion of independent contractors and the level of economic development. Carree *et al.* (2002) claim that entrepreneurship and economic advancement have a nonlinear relationship.

Additionally, Beck *et al.* (2005) estimate the standard growth regression and find that the proportion of employment in the SMEs sector, as well as economic growth for a cross-section of nations, are positively influenced, but not significantly. Audretsch and Keilbach (2004) and Mueller (2007) find, using a similar technique, that entrepreneurship indices have a positive impact on economic development in the context of industrialized nations.

Moreover, a few panel studies look at the role SMEs play in growth and development. Andre, Carree, and Thurik (2004) investigate the connection between the total quantity of entrepreneurial activity and the GDP growth of a sample of 36 countries. They also investigate whether this contribution depends on the GDP per capita indicator of economic development. The result shows that entrepreneurial activity by aspiring entrepreneurs and owner/managers of new businesses promotes economic growth, however the impact differs according on the level of per capita income.

METHODOLOGY

This study was basically a survey research study which required the use of questionnaire. The population for this study was comprised of small business owners from the agro-Allied and trading/business. The entire 100 questionnaire was administered to the respondents. However, 80 were returned and that represent the sample size of the study. The main instrument for data collection was a well-structured questionnaire with five points Likert scale as follows:

Option	Weight
Strongly Agreed	5 points
Agreed	4 points
Undecided	3 points
Disagreed	2 points
Strongly Disagreed	1 point

Data were gathered through the administration of the questionnaire, were coded, tabulated, and analyzed according to the research questions and hypotheses. To enhance efficiency and accuracy of data collected, the statistics table format was used for testing the research questions while the multiple regression method was used for testing the hypotheses.

The variables that were used where classified into two (dependent and independent variables). In the data regressed and collected, the dependent is Y (response variable) while the independent is X (explanatory variable), the specification of the variable is given by:

$Y=\beta_0 + \beta_1 x_1 + \mu_t$

RESULTS AND DISCUSSIONS

Table 1: Distribution of questionnaire and response rate

Total copies of questionnaire	**Respondents**	**Percentage (%)**
Number returned	80	80
Number not returned	20	20
Total	**100**	**100**

Source: Field survey, 2022

From Table 1, 80% of the respondents responded and return their questionnaire while 20% of the questionnaires were null and void.

Data Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.940[a]	.883	.877	.45444	.735

a. Predictors: (Constant), PURCHASING COST, PRODUCTION COST, WAGE COST, MAINTENANCE COST

b. Dependent Variable: SURVIVAL

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	87.369	3	29.123	141.023	.000[b]
	Residual	11.565	56	.207		
	Total	98.933	59			

a. Dependent Variable: SURVIVAL

b. Predictors: (Constant), PURCHASING COST, PRODUCTION COST, WAGE COST, MAINTENANCE COST

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.103	.193		-.534	.596
	PURCHASING COST	.746	.150	.716	4.975	.000
	PRODUCTION COST	.101	.142	.109	.712	.049
	WAGE COST	.120	.127	.128	.946	.048
	MAINTENANCE COST	.345	.121	.112	.895	.002

a. Dependent Variable: SURVIVAL

The coefficient of determination R-square of 0.883 implied that 88.3% of the sample variation in the dependent variable survival is explained or caused by the explanatory variables (increase in purchasing costs, increase in production costs, increase in wage cost and increase in maintenance costs) while 11.7% is unexplained. This remaining 11.7% could be caused by other factors or variables not built into the model. The value of R-square is an indication of a relationship between the dependent variable (survival) and independent variable (increase in purchasing costs, increase in production costs, increase in wage cost and increase in maintenance costs). The value of the adjusted R^2 is 0.877. This shows that the regression line which captures 87.7 per cent of the total variation in (survival) is caused by variation in the explanatory variable specified in the model with less than 12.3 per cent accounted for the stochastic error term. The F-statistic was also used to test the overall significant of the model. The F-value of 141.023 is an indication that the model is statistically significant at 5 percent level of significant at degree of freedom df1= 1 and df2= 3. Finally, the test of autocorrelation using Durbin-Watson shows that the Durbin-Watson value of 0.735 falls outside the conclusive region of Durbin-Watson partition curve. Hence, we can clearly say that there exists some degree of autocorrelation.

Hypothesis one

H_{0i}**:**Increasing purchasing costs do not significantly affect the survival of small businesses in Abia State, Nigeria.

The probability value of 0.0000 is less than 0.05 the null hypotheses is rejected and we therefore conclude that increasing purchasing costs significantly affect the survival of small businesses in Abia State, Nigeria.

Hypothesis two

H_{0ii}**:**Increasing production costs do not significantly affect the survival of small businesses in Abia State, Nigeria.

The probability value of 0.049 is less than 0.05 the null hypotheses is rejected and we therefore conclude that increasing production costs significantly affect the survival of small businesses in Abia State, Nigeria.

Hypothesis three

H_{0iii}**:** Increasing wage costs do not significantly affect the survival of small businesses in Abia State, Nigeria.

The probability value of 0.048 is less than 0.05 the null hypotheses is rejected and we therefore conclude that increasing wage costs significantly affect the survival of small businesses in Abia State, Nigeria.

Hypothesis four

H_{0iv}**:** Increasing maintenance costs do not significantly affect the survival of small businesses in Abia State, Nigeria.

The probability value of 0.002 is less than 0.05 the null hypotheses is rejected and we therefore conclude that increasing maintenance costs significantly affect the survival of small businesses in Abia State, Nigeria.

Discussion on Findings

Based on the results, the following findings were summarized thus:

(i) Growing purchasing costs significantly affect the viability of small businesses in Abia State, Nigeria,. The findings are consistent with those of Abubakar (2015), who discovered that inflation had an effect on the performance of Nigerian businesses.

(ii) In Abia State, Nigeria, the survival of small businesses is significantly impacted by growing manufacturing costs. The findings align with the research conducted by Chinweuba and Sunday (2015), which suggested that an increase in manufacturing costs might potentially affect a company's profitability.

(iii) Growing labor costs significantly affect the viability of small businesses in Abia State, Nigeria. The findings support the claim stated by Motilewa *et al*. (2015) that the performance of businesses is significantly impacted by inflation.

(iv) In Abia State, Nigeria, growing maintenance costs significantly affect the viability of small businesses. The findings supports the view of Cravo *et al*. (2009), which stated increase in management cost as a result of inflation negatively affect firms performance.

CONCLUSION AND RECOMMENDATIONS

The importance of Small and Medium-Sized Enterprises (SMEs) to the nation's economy cannot be overstated. Government attention to these firms has increased recently, particularly in third-world

countries. This is partly because of growing discontent with the results of development plans that gave priority to expensive, large-scale, heavily import-dependent industrial units. Small and medium-sized enterprises (SMEs) have an impact in a number of ways, including job creation, more efficient use of local resources, support for rural development, entrepreneurship, mobilization of local savings, connections with larger industries, promotion of regional balance through more equitable investment distribution, opportunities for self-employment, and training of managers and semi-skilled workers. Most developed and developing countries rely on the dynamism, creativity, and risk-taking of small and medium-sized enterprises to initiate and sustain economic growth. Profits are impacted by inflation in a several ways, including how it impacts sales volume, how much it costs, and how cost and price are related. Pricing strategy becomes especially crucial in inflationary times since manufacturing enterprises often base their prices on costs, and the amount of profit varies depending on whether prices are set based on original cost or current replacement cost.
The study comes to the conclusion that rising purchasing costs have a major impact on small firms' ability to survive. In Abia State, Nigeria, rising manufacturing prices have little effect on small enterprises' ability to survive. Rising labor costs in Abia State, Nigeria, significantly affect the viability of small businesses. Growing maintenance costs have a significant effect on the viability of small businesses in Abia State, Nigeria. In general, the likelihood of a firm surviving is decreased by inflation. When the cost of manufacturing products and services rises, businesses frequently witness a reduction in their customer base and sales below their predicted levels. In view of the findings so far, the recommendations are that:

(1) In order to ensure the survival of small businesses, some steps should be done to reduce the impact of inflation on company decisions about performance.
(2) The government must to guarantee that modern policy innovations consistently replace antiquated ones, empowering the economy to cope with the continuous financial globalization and supporting small enterprises specifically.
(3) In order to counteract the negative impacts of inflation on the ability of businesses to survive, there should be a panic effect or an increase in the expansionary policy mechanism.
(4) A collaborative effort between public and private entities is required to regulate economic growth through the timely execution of monetary policy.

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MANAGEMENT OF INFORMAL SECTOR ACTIVITIES AND PROBLEMS OF GOVERENEMENT REGULATIONS: A SURVEY OF IKWO LOCAL GOVERNMENT AREA OF EBONYI STATE, SOUTH EAST OF NIGERIA

[1]Uwazie, Iyke U., [1]Samuel Chinaza G., [1]Agu Sopuluchkwu L., [1]Mbakwe Joy and [2]Azuka Chinonso S.

[1]Michael Okpara University of Agriculture, Umudike Umuahia

[2]Federal University Ndufu Alike Ikwo, Ebonyi State, Nigeria

ABSTRACT

There have been growing concerns about the persistent rise in the size of the informal sector given the troubles and difficulties it presents the government in keeping an actual record of all economic activities in the state. This study investigated the reason behind this continuous rise and how this continuous rise has affected the management of informal activities in Ikwo Local Government. Adopting the Binary Logistics Regression (BLR) model, the study analyzed a cross sectional dataset obtained from 200 informal sector operators. Based on the result of the empirical findings, the study discovered that government policies was a major factor that pushed individuals into the informal sector and that the persistent rise in the size informal sector was a strong factor that have made managing the sector difficult for the government. Therefore, the study established that if the government can reduce its tax rates, cut down a bit on the bureaucratic protocols in the formal sector, many informal operators will be encouraged tooperate in the formal sector and thus contribute maximally to the overall economy of the state.

Keywords: Informal Sectors Activities, Operators, Government Regulation, Binary Logistic Regression (BRL) Model

INTRODUCTION

In recent years, the informal sector has experienced worldwide growth and also emerged in new and unexpected forms and places. In part, this stems from the significant expansion in informal employment during the recent economic recession (Horn, 2010). Today informal employment is above the average industrial employment in most developed and developing countries (Vanek *et al.,* 2014). This renewed interest also stems from a recognized link between the formal sector, growth, and the problems of regulating the informal sector alongside the attempts to absorb the informal sector into the formal economy. In sum, although the interest in the informal economy has waxed and waned since the 1970s, researchers have continued with in-depth study into the concept because though the informal economy contributes significantly to the global economy, it has remained outside the regulation and protection of the state despite several attempts. A recent report from the International Labour Organization (ILO, 2013), shows that two billion (61.2%) of the global employed population aged 15 years and above are informal workers.

The general informal sector is characterized by activities (such as that of a street vendor, pushcart vendor, painter, carpenter, roadside barber, mechanic, electrician, an unregistered restaurant, an unregistered cyber cafe, an unregistered mining operation, etc) that are neither taxed nor monitored by the government. Though the concept initially related to self-employment in unregistered enterprises, it has been extended to wage employment in unprotected jobs. Although a significant portion of the economy of developing countries is made up of the informal sector, it is still considered sometimes unmanageable and troublesome (Wilson *et al*., 2006). However, it is important to note that the informal sector provides significant economic opportunities for the poor and has since been rapidly expanding (Van Ginneken, 1999). Therefore, a vital policy challenge has been the integration of the informal economy into the formal sector alongside regulating the activities of the informal economy.

In many cases, the informal sector activities are not included in a country's Gross Domestic Product (GDP) unlike the formal sector; however, in since 2014, some European countries have included the informal sector activities when calculating their GDP resulting in about 3% - 7%. According to Wikipedia (2020), Ebonyi State recorded a GDP of 2,732USD in 2020 and its informal sector generated about 40% of this amount in that same year. Though these contributions to the economy, certain groups suffer disproportionally from informal arrangement mostly children, migrants, women, and the disabled and this is evident in the Ebonyi State economy. Mitlin and Satterthwaite (2012), discovered that in Nairobi (Kenya), child mortality rates are twice the national average in certain states and settlements dominated by the informal sector activities (shadow economy) due to low wages. The informal sector in Ebonyi State has

over the years been characterized by long working hours, low wages, inadequate social security regulations, difficulties exercising employee rights, combating worker's exploitation, low revenue on the part of the government, high insecurity which naturally increases the government's expenditure, etc.

Considering the long-term implications these informal sector activities have on the populace and the government, policymakers have called for and suggested several policies to regulate and protect this sector or its integration into the informal economy (UN-Habitat, 2015a). Dibben *et al.* (2015), posit that the informal economy could be regulated by applying either hard policies (use of crackdowns or penalties, positive incentives for compliance with rules and regulations) or soft policies (measures to improve conditions of employment and expand decent work).

However, the informal sector in developing countries especially Nigeria is not farfetched from the need to create employment instead of waiting for the government to do so. In Ebonyi State, the persistent growth of the informal sector has been giving successive administrations a hard time as the informal sector has simultaneously led to an increase in population and congestion via transport services while not contributing to the state's Gross Domestic Product (GDP). Although the contributions of the informal economy cannot be overemphasized, there are numerous grounds why it is considered troublesome. Ogar & Amanze, (2019), revealed that 87% of residents of Ebonyi State in the unregulated/informal sector, are being owed wages. The informal sector in Ebonyi State is largely unregulated, creating an opportunity to breed malpractices that go unnoticed, tucked away from public discourse and often without consequences. In another study, it was revealed by Awa (2022), that about 98% of residents of Ebonyi pay taxes daily; however, these taxes are paid to different illegal groups which do not represent the interest of the state or government.

This we might think would make the informal sector unattractive, rather, the heavy burdens of taxes, bribes, and bureaucratic hassles in the formal economy, push many producers into the informal sector in Ebonyi. This situation is not only explicable as a consequence of either the ignorance or incompetence of the state's administrations but also because of the important unobservable components of productive endowments of producers in the state. Therefore, the amount extracted from producers in the formal sector by the state can't be reduced. Given this fact, we discover that, if either the distribution of endowments is sufficiently in egalitarian or the production of private substitutes for public goods is sufficiently easy, then a large amount would be extracted from producers in the formal sector by the state which would instigate producers who are poorly endowed to rather produce in the informal economy.

Generally, the technologies possessed by the informal sector producers are mostly rudimentary and labor productivity is categorically low, intermediate inputs, especially imports, are not as plentiful as in the formal sector and fixed cost is at its minimum (Ordonez, 2014). Capital productivity can be quite high in the informal sector. The level of marginal commitment of financial capital to create a job in Ebonyi's informal economy is a fraction of that of the formal sector, leading policymakers in the state to think of the informal sector as a "cheap means of employment creation".

Capitalists in Ebonyi are deprived of the profits that were there earned if all demands are satisfied formally, by the informal sector producers. Producers in the informal sector cannot be prevented by their counterparts in the formal sector, from encroaching into their markets since, even if the prices are reduced by the formal sector producers, there would be no other alternative for their informal sector counterparts than to match the lower prices. This is just the tip of the iceberg regarding the effects of the informal economy and the importance to regulate its activities in Ebonyi State.

Economic informality has remained an expressive standard in Ebonyi State in the last decade. The expectations of the modernization theories of the transformation of the informal economy to the formal one have failed with the persistent expansion of the informal economy. Flexible capital accumulation has engendered new factors which in turn has fueled the informal economy in several ways while its resurgence has resulted from the deregulation of labor relations, alongside economic recession (Gutiérrez-Romero, 2021). As long as the spread of the formal economy continues to pose a threat to persistent structural obstacles, that at times maintains it practically as a sector located amid the formal predominance. The enforcement of regulations and legal frameworks have remained partial and restricted in a hybrid "institution" of the economy (Polanyi, 1957), which we have come across in countries across the globe.

Massive rural-urban migration alongside an accelerating rise in the population growth rate has made informality in Ebonyi State a massive reality in the last five decades. The low-level qualifications of workers, who migrate from the rural to the urban areas, face rejection by the formal labor sector and lack the means to guarantee that they fit into the economy (Agergaard & Thao, 2011). This contingent is compelled to survive on its own, therefore, disregarding the law and without formal records, engaging in

temporary occupations. As a result, there has been a drastic change in the Ebonyi State economy with the expansion of its informal sector and urban poverty. New generations are producing in the informal sector due to the process of productive restructuring and subsequent transformation waves.

Topped by tax evasion strategies of huge finance, firms, which use tax havens and other strategies, underground forms of the economy (informal), have spread from the smuggling of products and weapons to trafficking in drugs and human beings. In addition to a historically dramatic picture, the original form of the informal economy ranging from the grassroots, family, and community-based sectors has suffered great harmful effects from these "new infamous informalities" (Peemans, 2013). This is a core reason why the regulation of the informal economy is considered a very important and urgent action that must be taken by the government. Although some self-employed voluntarily choose to work informally to evade taxes and avoid registration, some others do so out of necessity or tradition. Any effort aimed at reducing barriers to registration and other related transaction costs would be welcomed by informal sector producers, especially in the light of incentives i.e. if they will receive some benefits of formalizing such as tax holidays, etc. In Ebonyi State, the recent rise in informal employment which in turn has expanded its informal sector is attributed to the formalization of once-formal employment relationships. Employers often prefer to retain a small and highly skilled workforce while hiring the other numerous workers needed informally in a bid to avoid payroll taxes and other employers' social security contributions alongside pensions or gratuities. This points out that there are strands of informality even in the formal sector in Ebonyi. This implies that there is an existing link between the informal and the formal sector via labor and capital mobility, besides the flow of goods and services. Therefore, the informal sector has great implications for the overall economy which makes attempts to regulate its activities vital as informality seems to be on a persistent rise driven by factors such as the heavy burden of taxes, bribes, and the inflexible bureaucratic regulations in the formal economy.

In Ebonyi, the informal sector has acted as a haven for informal employment and productive activities being dynamic and extensive and this has stemmed from its capacity to avoid bureaucracies and legalities. Some people may consider this a benefit to the state when income and savings from the informal sector are spent on consumer goods being produced formally. However, it is also a problem for the state, when revenue in the short run is considered; hence, formal economic activities are restrained by the subsequent rise in the cost of producing formally; i.e. tax payers have to bear the cost of tax evaders. Lower productivity and economic growth, and less expenditure on public utilities are a result of lower tax collection. The environment in Ebonyi State is also adversely affected by the excessive emission of gases into the atmosphere since there is an absence of any form of environmental regulations and fines on informal sector producers. The relatively high incidence of poverty and weak social welfare institutions in the state has made the informal sector an alternative/substitute for social security. Therefore, a pressing issue for policymakers is designing interventions to the size of the informal economy, without hurting or compromising the overall prospects of the informal economy. This becomes a herculean task especially when the mere existence of the informal sector distorts the accuracy, detail, and sectoral average in national accounts data which may lead to ineffective policies.

LITERATURE REVIEW

Informal Sector Activities

The expression "informal economy" covers a huge diversity of situations and phenomena. It displays itself in various forms within and across economies just as it does in Ebonyi State. In the labour market, informality is a vital characteristic in which millions of economic units operate and thousands of workers pursue their livelihood based on the conditions of informality. The informal sector according to the International Monetary Fund (IMF, 2020), is an embodiment of activities that possess market value and increases tax revenue alongside GDP if they were recorded. The informal sector persists for several reasons. On one hand, individuals and firms in an attempt to avoid taxes and social or bureaucratic requirements may choose to stay outside the formal economy. On the other hand, it could be a result of the extent of government regulation in the formal economy. Informality is encountered in our day-to-day living in such simple activities as purchasing from a petty trader, and arranging for an electrician to do repair work at our home for cash. The concept of the informal sector originated in the Third World, following a series of research conducted on urban labour markets in Africa. An economic anthropologist Keith Hart developed the term by viewing it as an expression of "the gap between my experience there and anything my English education has taught me" (Hart, 1990). In his view based on observations from several African capitals, the observed economic characteristics were not in line with received knowledge

from the "assumptions of western education on economic development". Sometimes the concept of informality is confused with self-employment.

However, the informal sector lost this unique feature when the concept was institutionalized within the bureaucratic system of the ILO, which redefined the concept as synonymous with poverty. Based on this new definition, the informal economy is referred to as the "urban way of doing things" characterized by family ownership of enterprises; the small scale of operation; low or almost no barriers in terms of skills, capital, and organization; labour-intensive production with crude technology; an unrestricted, unregulated and competitive market, etc (Sethuraman 1991; Suski, 1995). An additional feature based on this definition included low production and accumulation level (Suski, 1995). In a publication later on, the ILO's Regional Employment Programmes for Latin America (PREALC), considered informal employment as underemployment which affected workers who were not gainfully employed in the formal sector (PREALC 1985; Chacaltana *et al*, 2022; Suski, 1995). However, the dualist considered the informal economy as a separate marginal economy not directly attached to the formal economy which serve as a safety net and source of livelihood for the poor (ILO, 1972). To the structuralists, the informal economy serves as a subordinate to the formal economy. A capitalist with huge capital accumulation in an attempt to cut down their production cost dominates small-scale producers and petty traders. The informal economy based on the definition put forward by Hart (1990) and Portes *et al*. (1989) is a non-wage and unorganized sector of the economy whileJensen *et al.* (2019), identified the informal sector based on variations in productivity.

Government Regulations

On the other hand, government regulations are the use of effective rules to manage or coordinate the activities of any sector such as the informal sector (Prado, 2011). The government's regulation of businesses implies the use of the coercive power of the state provided by the constitution to alter the entry, investments, and production decisions alongside processes and pricing of businesses. These regulations could come in the form of tax codes, employment and labor laws, antitrust laws, advertising, email marketing, environmental regulations, privacy, licensing and permits, insurance, reporting pay data, and collecting sales tax. According to Lizina *et al* (2020), regulations are only considered effective if it is being carried out by businesses. Regulations impact a business or firm either positively or negatively which would determine if it would be complied with. ToFredström *et al* (2021), the government's regulations consist of a series of requirements firms must fulfill which would, in the long run, would satisfy the government's goals. Some of these goals include better and cheaper services and goods, protection of existing firms from unfair competitive strategies, a safer environment, a peaceful society, and the ultimate which is increasing economic growth and development. But the Organization for Economic Co-operation and Development saw it from a different perspective. They considered regulations as the imposition of rules by the government, with the use of penalties to modify individuals' and firms' behaviors in the economy. Eijdenberg *et al* (2019), continued in this same line of thought as they defined government regulations as the promulgation of targeted rules accompanied by some authoritative mechanism for monitoring and enforcing compliance.

Theoretical Literature Review

Neo-liberalism

Peruvian economist Hernando De Soto after publishing his treatise on Latin America's informal sector caused a paradigm shift of some sort (Henken, 2005). Neoliberalism is an economic ideology and policy model that brings to light the beneficial aspects of free market competition. It is greatly related to laissez-faire economics. Neoliberalists strongly believe that resources can only be efficiently allocated by market mechanisms, and the government's interventions in the economy should be at the barest minimum. Although closely related to modern liberalism both have a common root in 19th-century classical liberalism. Liberalism in any form is mostly associated with Adam Smith, who in 1776 postulated that an economy is guided by an invisible hand, therefore, advocating the need for minimal government intervention in the economy. However, the idea began evolving into various variants. Modern liberalism developed from social liberalism which centered on the resulting disadvantages (wealth and income inequality, exploitation, poverty, discrimination, etc) of the uncontrolled individual freedom that came along with capitalism. This made the government to get involved and prompted them to begin regulating the economy. By the late 1970s, the persistent rise in government debts, economic stagnation, and the increasing attempts made by entrepreneurs to avoid the numerous government regulations on various economic activities, prompted some economists to advocate a return to classical liberalism, which was then called neo-liberalism in its revived form. This revival was championed by the Austrian-born British economist Friedrich von Hayek, who argued that these interventions, whose main aim was to redistribute

economic resources, were now becoming too burdensome and would in the long run lead to totalitarianism. Milton Friedman also followed in this line of thought, opposing fiscal policy which was aimed at influencing the business cycle which he predicted would discourage producers and make them opt for other alternatives.

The informal economy is believed to be a remnant of pre-modern production that was disappearing with the increasing totalitarianism and hegemony (Boeke, 1942; Geertz, 1963; Williams, 2013). Neo-liberalism has painted informality to be an integral part of modern capitalism and a core feature of the new outsourcing, downsizing, and subcontracting practices that have come to be under deregulated global capitalism. Given this, workers are considered to seek employment in the informal sector out of necessity not by individual choice (Castells and Portes, 1989; Davis, 2006; Gallin, 2001; Taiwo, 2013). Neo-liberalism also assumes that business activities in the informal economy are undergone based on self-employment, which argues that such endeavor is conducted as a result of rational economic decisions of workers to make profits from business activities by exiting the formal economy forced out by high taxes, a corrupt bureaucratic system alongside a burdensome regulatory environment (Nwabuzor, 2005; Savvy, 1984). Therefore, Neo-liberalism suggests that the persistent increase in the size of the informal sector is a result of burdensome government regulations which is inevitable when the state regulates and restricts economic activities. In an attempt to remain in business and to earn a living, producers opt for a haven that they find in the informal sector where no form of regulations or restrictions exists allowing only for competition. Following the increase in the production level in the informal economy, there is a great number of job opportunities for both skilled and unskilled labor which in turn attracts unemployed individuals or workers m the formal economy. Scholars from this perspective take note of the creativity, entrepreneurship, and rationality of employees in creating new income sources and upgrading their economic status in light of the high cost of legality. Therefore, informality is considered to be the product of the responses of free market forces to the failure of government intervention. According to Selwyn (2013), most entrepreneurs that are primarily profit-driven seem to lack the motivation to improve the working conditions of their employees.

Modernization Theory

Rostow (1960), in his book, The Stages of Economic Growth: A Non- Communist Manifesto in the aftermath of World War 2, suggested the modernization approach to solving the issue of national development. He considered the underdevelopment of Third World countries as a social problem caused by internal phenomena such as the backwardness of socio- economic systems (Walton, 1981). Thus, according to him, the solution to this problem was by acquiring 'modern' values, 'modern' legal institutions, and a 'modern' political system. Therefore, the problem of informality was not a result of capitalist exploitation but rather, a result of a country's inability to sufficiently incorporate into the modern world or global economy.

This set of theories became popular in the 1950s and 1960s about understanding the issues of economic development and would assist in the transition of economically backward economies into developed economies. This view has dominated almost half of the 20th century which put forward the notion that the informal sector is a temporal and residual phenomenon that would gradually fade off with the modernization of the overall economy (Biles, 2008). This set of theories was not exactly a coherent set of ideas but rather a variety of theories that came from a wide range of social disciplines. Modernization theory considers development as a uniform growth process that once followed will automatically lead any economy to development i.e. once an economy follows predetermined steps it will eventually attain development. It, therefore, believes that the informal economy will eventually transition into the formal economy. Under these perspectives, the formal economy is considered to be a thriving sector with a promising future where it could attain development, modernity, and advancement while the informal economy is considered to be a traditional activity that signifies backwardness, underdevelopment, and pre-modernity (Williams *et al.*, 2007).

Workers in the informal sector were considered to be trapped outside the modern economy due to their lack of proper education, skills, and value orientation. Given the dualistic nature of the economy, the modernization approach is also related to dualism, which is grounded in the works of Lewis, Todaro, and Harris. Based on these theories, the informal economy is expected to shrink as a country attains advancement and development. This suggests that the informal economy is expected to experience a fall proportional to an increase in the per capital gross product of a country (Schneider, 2012). These theories point out that the persistence of the informal economy results from the failure of the formal economy to provide job opportunities. Therefore, there are chances for the informal economy to grow when the unemployment rate rises (Chaudhuri, 2000; ILO, 2002; Elgin *et al.*, 2013). These theories also purports

that an increase in the level of rural-to-urban migration would result in the growth of the informal economy given the limited employment opportunities in the formal economy.

According to Rostow (1956, 1960), development follows five stages which involve the traditional economy in the first stage. An economy would move through these stages until it reaches the fifth and final stage when the economy attains maturity and efficiently adopts advanced technologies in its production process which would in turn lead to a higher production matrix and therefore higher profits. He concluded that this would therefore discourage producers from looking for an alternative to the formal economy since the aim for oping for the informal economy is to remain in business and make a profit. The informal economy would in the long run become formalized when the economy attains development. Therefore, these theories purport, that economic development will bring about the reduction of the informal economy and its formalization. In line with this prescription, the modernist believes the idea that the urban surpluses would eventually fade off with the rise of industrialization.

Empirical Literature Review

Guo *et al.* (2022), studied the informal sector in China during the COVID-19 era to provide a first-hand view of the blow suffered by the informal sector during the coronavirus. The study utilized the Ordinary Least Square (OLS) model to analyze a weekly time series dataset that covered 5 months from December 2019 to May 2020. Variables such as sales turnover, economic environment, population, mobility restrictions, and business nature were utilized for this study. The result showed that the COVID-19 pandemic had a negative significant impact on the informal economy as it stagnated business growth during the period and drove their performance seven weeks back from where they were meant to be. However, it also revealed that the recovery process post-COVID-19 pandemic has been rapid due to the several technological integrations that occur during the lockdown in a bid to keep businesses operational. The authors concluded that the policy support that has been offered and provided by the Chinese Government has been the key driver for the pacy recovery experienced both in formal and informal sectors.

Sultana *et al.* (2022), implored the impact of the informal sector on the sustainability of developing countries. Employing the linear regression model, the authors studied a panel dataset obtained from 50 developing countries between 2010 to 2019 (9 years). Using variables such as access to electricity, economic freedom of countries, unemployment poverty, national expenditure, and GDP per capita, the result revealed the informal sector played a detrimental role in the sustainable development of developing countries while economic freedom alongside economic growth had a positive and significant impact on the sustainable development of developing countries. Therefore, they recommended a reduction of informality in economic and business activities as it limits the scope of economies. They also emphasized the importance of understanding the domain via which interventions to integrate the informal sector into the formal economy can be made. Kambule (2022), determined the effect of COVID-19 on the informal sector in South Africa post-COVID era. The study adopted a phenomenological model to analyze a cross-sectional dataset obtained primarily from 75 respondents in the KwaDukuza municipality of South Africa. This study employed income, family size, access to social welfare schemes, gender, and GDP per capita. The result showed that the COVID-19 lockdown had a negative significant impact on the South African informal sector post-COVID era and amplified the precariousness of informal workers. COVID-19 increased the level of poverty, vulnerability, and unemployment among informal workers which meant a socioeconomic decline in the informal sector. The author suggested that proactive and timely interventions specifically targeted at those in the most precarious and affected jobs amid the prolonged lockdown were required the reduce the effect of the COVID-19 lockdown on informal workers in the post-COVID era.

Parajuli *et al.* (2021), studied the challenges of transforming the informal business sector towards the formal business sector in Nepal. Using a cross-sectional dataset obtained from the responses of 403 respondents to interviews and questionnaireswhile adopting an OLS regression approach, it was discovered that several socio-economic factors such as educational qualification, age, income, wage rate, and employment status all contributed to hampering the chances of transitioning the informal business sector into the formal sector. The empirical findings showed that educational attainment had a negative and significant effect on the size of the informal sector while age and income had a positive and significant effect on the size of the informal sector. It was discovered that individuals with high educational attainment were less interested in producing or working in the informal sector while individuals in their prime age were more interested in operating in the informal sector. They proposed that if the government could look into the issues behind each class of individuals (low minimum age rate on the part of the poor), it would be able to tackle these militating factors and at least ease the fast rate of growth of the informal business sector. Makoni and Tichaawa (2021), examined the effect of the COVID-19 pandemic on

informal business tourism in Zimbabwe. Employing a thematic analytical approach, the authors studied cross-sectional data obtained secondarily from the reviews of other papers. The study utilized variables such as the supply of goods, household income, business nature, household size, and educational level. The empirical findings showed that the shortage of the supply of basic commodities by the formal sector alongside the survival strategies of business traders, contributed to the increased informal sector activities after the COVID-19 lockdown. This is reflected in the increase in the smuggling of household goods, the increase in informal business, and informal employment post-coronavirus. The authors concluded that given that 90% of the Zimbabwean economy was made up of the informal sector; therefore, the suspension of international travel and the strict national lockdown presented dire consequences for the Zimbabwean economy and led to a loss of funds for even informal sector operators. Huda and Islam (2020), examined the employment opportunities in the informal sector using evidence from urban cities in Bangladesh. Utilizing a central tendency analysis model, the authors analyzed a cross-sectional data set obtained from the responses of 387 respondents to a survey conducted in five cities in Bangladesh (Dhaka, Chattogram, Rajshahi, Khulna, and Sylhet). The study employed variables like age, gender, income level, wage rate, dependency level, job opportunities, unemployment rate, and GDP. The findings indicated that the informal sector has a positive and significant impact on the employment rate as it generates about 99% of the total employment and contributes about 50% of Bangladesh's GDP annually. The study, therefore, identified some problems faced by participants in the informal sector ranging from a shortage of capital to low profitability and high service charges. The authors concluded that if the government could formulate and implement policies that would tackle these problems, the full potential of the informal economy could be harnessed by the semi-formalization of the sector.

Swain *et al.* (2020), studied the role of regulation, governance, and the role of the informal sector in influencing environmental quality. The study aimed to investigate the effect of the informal sector alongside a series of government indicators on global and local pollutants. The authors employed the Fixed Effects-Instrumental variable (IV-FE)[4] to analyze a panel dataset obtained from 58 countries covering the period of 1996-2011 (15 years). The study used variables such as GDP per capita, CO^2 per capita, energy use, water pollutant per worker, corruption control, government effectiveness, trade level, and ecological footprint. The result showed that the size of the informal sector has a significant impact on the environmental quality, but is conditional on the development level. For developing economies, the size of the informal sector has a significantly positive effect on local pollutants whereas for developed economies, the size of the informal sector has a significantly negative effect on global pollutants. It was also discovered based on the result of the analysis that the impact of governance was dependent on the type of governance measure, the level of economic development the type of pollutant under consideration. Controlling corruption emerged as the most important factor in improving environmental quality, especially in OECD countries. The authors concluded that the effectiveness of any environmental policy in a country with a large informal sector will be low if governance, size of the informal sector, and environmental policy target are not addressed by the policy measures. Mukorera (2019) examined the willingness to formalize using the informal MSMEs in Zimbabwe as a case study. The study employed the Principal Component Analysis (PCA) alongside the Logistics model to study a cross-sectional dataset obtained primarily from 88 respondents (MSMEs). The variables utilized were access to technology, entrepreneurial ability, regulatory burden, income level, gender, age, and GDP per capita. The result showed that the willingness and unwillingness of informal operators to formalize is significantly related to bureaucratic asymmetry regarding the registration process, access to technology, management skills, institutional imperfections, and financial/market constraints. Therefore, the study concluded that the improvement of bureaucracies in the registration process, increasing access to technology, and reducing financial and market constraints alongside developing managerial skills of informal sector operators via training will increase the odds of these operators' willingness to formalize their businesses.

Mahadea and Zogli (2018) considered the internal affairs of the informal sector by investigating the constraints to growth in informal sector activities and formalization using the Ghanian slums as a case study. To conduct this study, the authors obtained a cross-sectional dataset by administering questionnaires to 342 random informal slum operators and utilized the principal component analysis (PCA) to measure enterprise constraints, and used the logistics regression to measure the probability of informal operators graduating to the formal sector. Based on the result of the analysis, gender, age, tax rate, the lack of entrepreneurial knowledge, lack of access to credit, lack of sufficient tools and materials, lack of security, and lack of social network were all identified to be constraints limiting the growth of the informal sector. The authors concluded that if policymakers could devise attractive financing strategies for

informal slum producers, then they would be happy to formalize them as that would guarantee the growth of their businesses.

METHODOLOGY

This research work seeks to examine the role of government regulations and other forms of government intervention in the persistent expansion of the informal sector of the Nigerian economy, using Ikwoa city situated in Ebonyi state as a case study. The study adopts population-based cross-sectional data which will be obtained utilizing a properly designed questionnaire distributed in Ikwo Local Government Area of Ebonyi State, Nigeria. This study will employ an inductive research design given the difficulty to cover the entire Ebonyi state in terms of data collection. Therefore, the result obtained from Ikwo Local Government Area will be inferred from the entire Ebonyi state.

A sample survey research design would be adopted for this research, given that it allows the researcher to describe certain aspects of the population under consideration, which in most cases involves ascertaining the nexus between variables (Kraemer, 1991). Individuals are the supplier of the data required for sample survey research. In ample survey research, a sampled portion of the population is utilized. The findings obtained from this sample are then generalized back to the entire population under consideration following a deductive approach. To utilize this survey, the researcher proposes a model which would identify the anticipated relationship existing between the variables being studied. This survey is conducted to test the proposed model against the observations of the phenomena (Ruel *et al*, 2015). A survey is a tool employed for data collection for survey research. Data which describes the characteristics, actions and a large group of individuals is collected via this means. In this study, the term 'survey concept is used frequently to differentiate between survey tool and survey instrument (Pinsonneault & Kraemer, 1993).

A cross-sectional dataset was adopted for this research work. Different variables were measured among the sleeted sample at a specific period. A well-structured questionnaire which was administered to the respondents was employed to accomplish this objective. In this study, several analytical tools were employed. For this study, SPSS will be utilized for the analysis of the data obtained from the questionnaire.

Model specification

The first objective of this research is to ascertain the contribution of government policies to the persistent rise in the size of the informal sector by identifying the several forms of government interventions and deciphering their impact on the informal sector. The second objective of this research work is to analyze if there exists any relationship between the size of the informal sector and the management of its activities. Therefore, the first and second objectives of this study will be done using the logit regression model.

The Logit model is adopted from Gujarati (2013) and specified as:

$$Pi = \frac{1}{1+e^{-Zi}} = \frac{e^{z}}{1+e^{z}} \qquad (2)$$

Where, $Zi = \beta_1+\beta_2X_i+\beta_3X_j$

Equation 2 represents the cumulative logistic distribution function. We can verify that as Pi ranges between 0 and 1, Zi ranges from -∞ to +∞ and Pi is linear in parameters but non-linear when related to Zi. If Pi, the probability that respondents who prefer the informal sector are 1 and respondents who did not prefer the informal sector is (1-Pi), therefore, the probability of the perception is given as

$$1 - Pi = \frac{1}{e^{z}+1} \qquad (3)$$

We rewrite the equation as

$$\frac{P}{1-Pi} = \frac{e^{z}}{e^{z}+1} * \frac{e^{z}+1}{1} = e^{Zi} \qquad (4)$$

$\frac{P}{1-Pi}$ This is the odds ratio in favor of the informal sector

Taking the natural log of equation (4) we have

$$Li = Ln\left(\frac{Pi}{1-Pi}\right) = Zi \qquad (5)$$

Zi remains defined as above. Zi = function of N-explanatory variables for the sake of this study, the logit model will be run for two regressions which is the preference for the informal sector which is used as a proxy for the size of the informal sector, and the loss of tax revenue as it is used as a proxy for the management of the informal sector.

$$Li\ (Preference\ of\ the\ informal\ sector) = ln\frac{Pi}{1-Pi} = \beta_1 + \beta_2 Xi + \beta_3 Xj + \mu i \qquad (6)$$

$$Li\ (Loss\ of\ tax\ revenue) = ln\frac{Pi}{1-Pi} = \beta_1 + \beta_2 Xi + \beta_3 Xj + \mu i \qquad (7)$$

The models will be explicitly stated as:

$$Preference\ of\ the\ informal\ sector = \beta_0 + \beta_1 Gender + \beta_2 Taxrate + \beta_3 HHSize + \beta_4 ProdCost + \beta_5 RegBureau + \beta_6 EDU + \mu_i \quad (8)$$

For the above parameters, where β_0 is the intercept; β_1 = Gender; β_2 = Tax rate
β_3 = Household Size; β_4 = Production Cost; β_5 = Registration Bureaucracies
β_6 = Education and μi = Error term

$$Loss\ of\ tax\ revenue = \beta_0 + \beta_1 Gender + \beta_2 Taxrate + \beta_3 HHSize + \beta_4 ProdCost + \beta_5 RegBureau + \beta_6 EDU + \mu_i \quad (9)$$

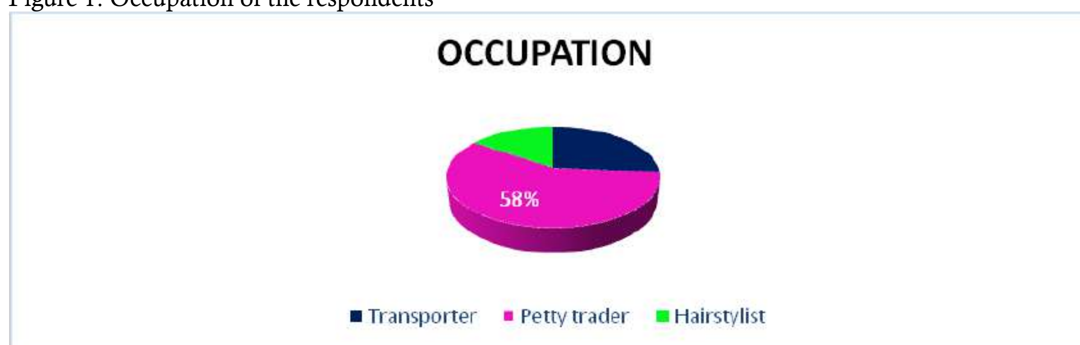
For the above parameters, where β_0 is the intercept; β_1 = Gender
β_2 = Tax rate; β_3 = Household Size; β_4 = Production Cost; β_5 = Registration Bureaucracies
β_6 = Education and μi = Error term

RESULTS AND DISCUSSION

Demographic Characteristics of the Respondents

The demographic characteristics of the respondents in Ikwo are represented in the Tables and charts below:

Figure 1: Occupation of the respondents



Three major sectors in the informal economy were surveyed which is depicted in the pie chart above; with petty traders constituting 58% of the respondents, transporters constituting 26.5%, and hairstylists constituting the remaining 15.5%.

It was observed based on the questionnaire that a majority of the respondents were between the ages of 18 to 35 as this age range constituted 70% of the respondents. This implies that the informal sector is majorly made up of individuals within this age range (18-35). However, some respondents were still within the age of 36 to 45 as this age range made up 26% of the respondents. The mass majority of the respondents were self-employed.

Table 2: Age Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-35	140	70.0	70.0	70.0
	36-45	52	26.0	26.0	96.0
	46-60	8	4.0	4.0	100.0
	Total	200	100.0	100.0	

Table 3: Income Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Salaried Employment	19	9.5	9.5	9.5
	Self-employment	174	87.0	87.0	96.5
	Pension	7	3.5	3.5	100.0
	Total	200	100.0	100.0	

Figure 2 depicts that about 62% of the respondents were males while about 38% of the respondents were females which depicts that males are dominant in the informal sector.

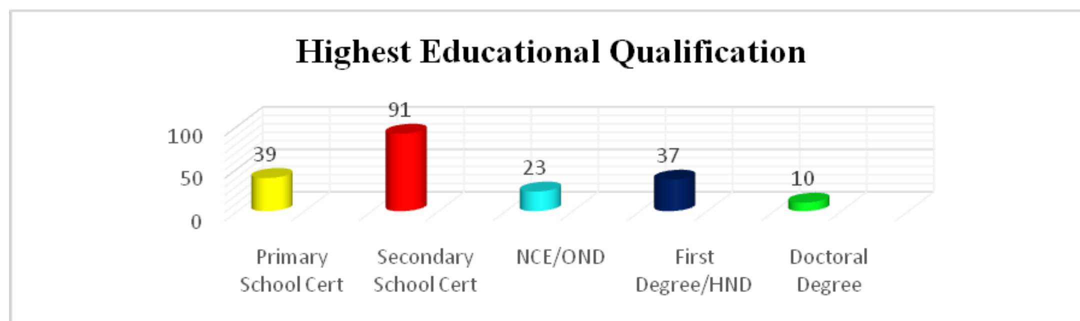
In Figure 3, it is vivid that the vast majority of informal workers in Ebonyi State are middle-income earners, earning 21,000 to 50,000 monthly as about 51% of the respondents earned within 21,000 to 50,000 monthly. About 22% of the respondents earn between 51,000 to 100,000 per month and 20% are high-income earners earning between 101,000 and 500,000 every month. About 7% are low-income earners, earning 5,000 and below per month.

Figure 2: Gender distribution of respondents

Figure 3: Monthly Earnings Distribution of the Respondents

According to Figure 4, in terms of educational qualification, 91 respondents from the total 200 respondents had their secondary school certificate as their highest educational qualification; while 39 respondents had only their primary school certificate. 37 respondents had their first degree, 23 respondents had either NCE or OND certificate and then 10 had attained their doctoral degrees. This implies that the informal sector in Ebonyi State is dominated by secondary school certificate holders as compared to any other educational level.

Figure 4: Educational Qualifications' Distribution Among the Respondents



Government Policies and Size of the Informal Sector
This section of this chapter will be concerned with interpreting the results of the binary logistics regression analysis conducted for both the first and second models to achieve both the first and second objectives.

Objective 1: To evaluate the level of effect that government policies have on the size of the informal sector, we interpret the result.

Table 4: Binary Logistics Regression Result

Number of Obs =				200		
LR chi^2 =				32		
Prob > chi^2 =				0.000		
-2 Log Likelihood =		72.651			Nagelkerke R^2 =	0.823
PreferInf	Coef,	Std. Err,	Z	Prob	[95% Conf. Interval]	
					Lower	Upper
Gender	-0.897	0.991	0.408	0.365	0.059	2.844
HH Size	22.140	31299.379	412481	0.999	0.000	0.000
Highest Edu Qualification	-3.879	1.661	0.021	0.020	0.001	0.536
Bus. Reg	-2.424	1.564	0.089	0.121	0.004	1.902
Bus. Reg Fee	2.494	1.932	12.106	0.197	0.274	534.048
Bus. Reg Period	1.001	0.680	2.721	0.141	0.718	10.309
Govt Policies Effect Extent	2.953	1.117	19.172	0.008	2.148	171.081
Govt Control	-0.881	1.325	0.414	0.506	0.031	5.564
Levy Payment	-40.388	13111.586	0.000	0.998	0.000	0.000
Levy Cost	0.008	0.038	1.008	0.838	0.937	1.085
Levy Effect	1.858	1.138	6.414	0.103	0.689	59.704
Hiding Trade Exp	-1.205	1.183	0.300	0.308	0.030	3.043
Hiding Trade Reasons Levies	3.729	1.358	41.629	0.006	2.906	596.340
Bus. Expenses	-0.238	0.513	0.754	0.581	0.278	2.059

From the table above, the dependent variable used for this analysis was preference for the informal sector proxied by the government's policies effect extent as the effect of government policies on business determines their willingness to operate in the informal sector. The independent variables were gender, tax rate (proxied by levy payment, levy cost, levy effects, and hiding to trade because of levies – hiding trade reasons levy), household size, production cost (proxied by hiding to trade expenses and business expenses), Registration bureaucracies (proxied by business registration, business registration fee, business registration period, government's policies affect extents and government control – i.e., the willingness for government to control their business) and educational level.
The probability value on the omnibus test result depicts that the model is fit given that the p-value which is 0.000 is less than 0.05 (5% level of significance). The Nagelkerke R^2 of 0.832 which is greater than 0.05 significance level shows that the predictor variables adequately predict the model (dependent variable).

The variable 'gender' is negative (-0.897) and not significant as 'P>z' = 0.365. Therefore, gender will negatively affect the preference for the informal sector but not significantly. Household size is positive (22.140) but also insignificant at a 5% level of significance (0.999). This implies that a one-unit increase in household size while holding all other variables constant, will result in a 22.140 increase in the informal sector preference (PreferInf). Educational qualification is negative (-3.879) and statistically significant (0.02). This implies that a unit increase in educational qualification will negatively impact the PreferInf significantly. BusReg is negative (-2.424) but statistically insignificant (0.121); which implies that a unit increase in BusReg will negatively influence PreferInf but not in a significant way. BusReg Fee is positive (2.494) but also statistically insignificant (0.197); meaning that a unit increase in BusReg Fee will positively impact PreferInf but not in a significant way. BusReg Period is positive (1.001) but statistically insignificant (0,141). This implies that a unit increase in BusReg Period will increase PreferInf by 1.001 but the increase will not be significant. Govt Policy Effect Extent is positive (2.953) and is also statistically significant (0.008); which implies that Govt Policy Effect Extent will positively and significantly influence PreferInf. Govt Control (the willingness to be controlled by the government) is negative (-0.881) and is insignificant (0.506); which implies that a unit increase in Govt Control will result in a reduction in PreferInf but this reduction will be insignificant. Levy payment is negative (-40.388) but insignificant (0.998); which implies that a unit increase in levy payment will influence PreferInf negatively but not in a way significant way. Levy Cost is positive (0.008), although insignificant (0.838); which implies that a unit increase in levy cost, will result in a 0.008 increase in PreferInf. Levy Effect is positive (1.858) and insignificant (0.103); which depicts the levy effect positively but insignificantly affects PreferInf. Hiding Trade Exp is negative (-1.205) but is insignificant (0.308). This implies that a unit increase in hiding trade expenses will result in a 1.205 decrease in PreferInf. Hiding Trade Reasons Levies (i.e., hiding to trade because of levies) is positive (3.729) and is statistically significant (0.006) which implies that a unit increase in Hiding Trade Reasons Levies will increase PreferInf by 3.729. BusExp is negative (-0.238) and is insignificant (0.581). This implies that BusExp has a negative impact of 0.238 on PreferInf; however, this impact is insignificant.

Therefore, from the analysis, the preference for the informal sector was utilized to capture the effect of the government's policies on the size of the informal sector (which has resulted from the interest to understand the role of government policies in the continuous rise in the size of the informal sector.

Objective 2: To evaluate the level of effect that the size of the informal sector has on the management of its activities, we interpret the result.

Binary Logistics Regression Result

Number of Obs =				200		
LR chi^2 =				33		
Prob > chi^2 =				0.000		
-2 Log Likelihood =		99.864			Nagelkerke R^2 =	0.783
PreferInf	Coef,	Std. Err,	Z	Prob	[95% Conf. Interval]	
					Lower	Upper
Gender	2.340	0.894	10.378	0.009	1.798	59.904
HH Size	0.107	19833.2	1.113	1.000	0.000	0.000
Highest Edu Qualification	8.209	2.858	3674.1	0.02	20.063	672820.747
Bus. Reg	0.002	1.274	1.002	0.999	0.087	11.533
Bus. Reg Fee	-0.004	0.002	0.996	0.017	0.992	0.999
Bus. Reg Period	-2.430	0.808	0.088	0.003	0.018	0.429
Govt Policies Effect	4.149	1.524	63.382	0.006	3.195	1257.180
Govt Policies Effect Extent	-0.003	0.002	0.997	0.074	0.994	1.000
Govt Control	-1.534	1.026	0.216	0.135	0.029	1.613
Levy Payment	-21.363	132.299	0.000	0.872	0.000	2.166
Levy Cost	0.019	0.133	1.019	0.886	0.786	1.322
Levy Effect	0.202	1.002	1.224	0.840	0.172	8.720
Hiding Trade Exp	1.742	1.079	5.710	0.106	0.689	47.325
Bus. Expenses	-0.137	0.415	0.872	0.741	0.386	1.968
Bus. Freedom	0.364	1.056	1.438	0.731	0.182	11.387

From the table above, the dependent variable used for this analysis was loss of tax revenue proxied by sales hiding, given that sales made by businesses in hiding cannot be accounted for or be taxed by the government which results in loss in tax revenue. The independent variables were gender, tax rate (proxied by levy payment, levy cost, and levy effects), household size, production cost (proxied by hiding to trade expenses and business expenses), Registration bureaucracies (proxied by business registration, business registration fee, business registration period, government's policies effect, government's policies effect extents, government control – i.e., the willingness for government to control their business and business freedom) and educational level.
The probability value on the omnibus test result depicts that the model is fit given that the p-value which is 0.000 is less than 0.05 (5% level of significance). The Nagelkerke R^2 of 0.783 which is greater than the 0.05 significance level shows that the predictor variables adequately predict the model (dependent variable).
The variable 'gender' is positive (2.340) and significant as 'P>z' = 0.009. Therefore, gender will positively and significantly affect the loss of tax revenue from the informal sector. Household size is positive (0.107) but insignificant at a 5% level of significance (1.000). This implies that a one-unit increase in household size while holding all other variables constant, will result in a 0.107 increase in the sales hiding (SalesHid). Educational qualification is positive (8.209) and statistically significant (0.02). This implies that a unit increase in educational qualification will positively impact SalesHid significantly. BusReg is positive (0.002) but statistically insignificant (0.999); which implies that a unit increase in BusReg will positively influence SalesHid but not in a significant way. BusReg Fee is negative (-0.004) but also statistically insignificant (0.017); meaning that a unit increase in BusReg Fee will negatively impact SalesHid but not in a significant way. BusReg Period is negative (-2.430) and statistically significant (0.003). This implies that a unit increase in BusReg Period- will decrease SalesHid by 2.430 and the decrease will be significant. Govt Policy Effect is positive (4.149) and is also statistically significant (0.006); which implies that Govt Policy Effect will positively and significantly influence SalesHid. Govt Policy Effect Extent is negative (-0.003) but statistically insignificant. This implies that a Govt Policy Effect Extent negatively influences SalesHid, but the impact is not significant. Govt Control (the willingness to be controlled by the government) is negative (-1.534) and is insignificant (0.135); which implies that a unit increase in Govt Control will result in a reduction in SalesHid but this reduction will be insignificant. Levy payment is negative (-21.363) but insignificant (0.872); which implies that a unit increase in levy payment will influence SalesHid negatively but not in a way significant way. Levy Cost is positive (0.019), although insignificant (0.886); which implies that a unit increase in levy cost, will result in a 0.019 increase in SalesHid. Levy Effect is positive (0.202) and insignificant (0.840); which depicts the levy effect positively but insignificantly affects SalesHid. Hiding Trade Exp is positive (1.742) but is insignificant (0.106). This implies that a unit increase in hiding trade expenses will result in a 1.742 increase in SalesHid. BusExp is negative (-0.137) and insignificant (0.741). This implies that BusExp has a negative impact of -0.137 on SalesHid; however, this impact is insignificant. Bus Freedom is positive (0.364) and insignificant (0.731). This implies that Bus Freedom has a positive impact of 0.364 on SalesHid; however, this impact is insignificant.
Therefore, from the analysis, the loss of tax revenue in the informal sector was employed to capture the effect of the size of the informal on the management of its activities (which has resulted from the interest to understand how the size of the informal sector affects the management of its activities).

This research paper was aimed at discovering the root cause behind the persistent rise of the informal sector and the difficulty behind the management of informal sector activities in Ebonyi State. Over the years there has been a debate as to why the informal sector has continued to rise despite the government's effort to control its size. Research has also shown that the size of the informal sector has sort of affected the ability of the government to monitor the activities in the sector. This represents the rationale behind the study of the management of informal sector activities and the problems of government regulations. The probability value of the Omnibus test showed that the model was fit which gave the justification for the continuation with the BLR (Binary Logistics Regression) model. A cross-sectional dataset was utilized to study the informal sector and the result showed that Gender, Household size, production cost, and registration bureaucracies all had a positive effect on why people preferred the informal sector. On the other hand, variables like education, registration bureaucracies, and production costs were all strong reasons for tax evasion (loss of tax revenue on the part of the government) in the informal sector.

CONCLUSION AND POLICY RECOMMENDATIONS

Having analyzed the effect of government policies on the size of the informal sector alongside the size of the informal sector on the management of government activities, it can be seen from the result that government policies are one of the major factors behind the preference for the informal sector and that the size of the informal sector makes it quite difficult for the government to manage informal sector activities. This is because government policies make it difficult to operate in the formal sector and also reduce profitability in the formal sector. Therefore, individuals are pushed into the informal sector out of necessity to survive, make a profit and earn a living. This is the key reason why the informal sector has been on a persistent increase and the subsequent large size of the informal sector especially that in Ikwo Local Government Area, makes it difficult for the government to monitor, control and manage informal sector activities. The inabilities of the government to control, restrict, regulate, or manage informal sector activities is reflected in the loss of tax revenue from informal sector activities.

Based on the findings of this, the paper made certain policy recommendations including:

- Reduction of tax rate: To encourage individuals to operate and carry out their business activities in the formal sector, the government should consider reducing the tax rate which will allow them to attain a reasonable level of profitability for their respective productive activities.
- Provision of easy access to credit: In a bid to also ensure that producers operate in the formal economy, the government should provide an enabling environment for business activities and this can be achieved by ensuring easy access to affordable credit facilities and schemes.
- Reduction in registration bureaucracy: Unnecessary protocols and red tape during registration makes business avoid the process which is the reason behind the unavailability of a record of businesses in the informal sector. Therefore, to avoid this, the government should reduce the red tape encountered by individuals and business owners during the registration process to encourage them to register their various business activities.

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ENVIRONMENTAL FACTORS (ESG) AND THE FINANCIALPERFORMANCE OFOIL AND GAS COMPANIES IN NIGERIA.

Ugwuanyi, Georgina O., Ikwuagwu, Eberechi B. and Ibe, Happy C.
Michael Okpara University of Agriculture,Umudike, Abia State,Nigeria
Corresponding author: ginaugwuanyi2010@gmail.com

ABSTRACT
This study examined the impact of Environmental Factors (ESG) on the financial performance of oil and gas companies in Nigeria which actually was the study's main objective. The specific objectives of the study were: to assess the impact of corporate environmental score on return on assets(ROA) of oil and gas companies in Nigeria; and also to ascertain the influence of corporate environmental Score on return on equity(ROE) of oil and gas companies in Nigeria. The study employed ex-post- facto research design and garnered data covering a ten-year period spanning from 2010- 2019 involving six oil and gas companies listed on the Nigerian stock exchange. For econometric analysis of the panel data, Eviews 10 was employed. Firm size (measured as total assets) stood as the control variable. The Hausman test revealed random effects model to be more appropriate and was applied to evaluate the impact of environmental score on financial performance of oil and gas companies in Nigeria. The econometric estimate showed that environmental score has positive and significant impact on return on assets of oil and gas companies in Nigeria. Equally, environmental score has positive and significant impact on return on equity of oil and gas companies in Nigeria. Conclusively, the random effect econometric estimator employed in this study indicates that corporate environmental score has significant impact on financial performance of oil and gas companies in Nigeria. Therefore, the study recommends among other things that companies, especially the oil and gas companies should incorporate and improve on their environment practices to enhance financial benefits attached to environmental good practices.
Keywords: Environmental factors, financial performance, oil and gas companies, Nigeria.

INTRODUCTION

The environmental factors of ESG **(**Environmental, Social and Corporate Governance) are factors used in assessing the company's sustainability and ethical impact of the company's operations. Through the harnessing of fossil fuels, humankind have acquired the power to effect thorough changes on air, water, soil, plant and animals, which constitute the natural environment (Eregha & Irughe, 2009). Corporate entities also, have changed the environment in many ways – for example, devastating natural habitats and wildlife with oil spills and acceleration of deforestation.

In Nigeria, the environmental degradation occasioned by hydrocarbon production in the Niger Delta area cannot be overlooked (Akinbi, 2012). There has been series of conflicts between the indigenous people of the region and major Oil Companies operating therein over the years. The region claims that the activities of the Oil Companies instead of improving have impoverished her people by causing a serious decline in their marine and agricultural resources, which constitute their economic main stay. Ashton, Arnott and Douglas(1999) ascertained that due to environmental pollution, there is drastic decline in the region's biodiversity and ecological resources, which are the main sources of their income and the people's mode of survival. In addition, there is an aspect of the health hazards posed to the inhabitants because of oil pollution of the environment. Hence, there are environmental challenges as well as socio- economic problems created by adverse effects of oil mining, which has culminated into low agricultural productivity and poor farm yields sufficient to threaten the food security of the Niger Delta (Ashton *et al.,* 1999). Report of the World Commission on Environment and Development 1987, indicates that environmental conservation was first given serious attention by business, industry, architects, and engineers in 1974; when the environmentalists lamented the increase in offshore oil drilling and the leasing of shale oil land by the US government. The global profile of environmental issues has risen significantly during the past two decades, precipitated in part by major incidents such as the Bhopal chemical leak (1984) and the Exxon Valdez oil spill (1989). These events received worldwide media attention and increased concerns over major issues such as global warming, depletion of non-renewable resources, and loss of natural habitats.

This has led to the questioning of business practices and numerous calls for change. These questions have not only been raised by organizations such as Friends of the Earth, Greenpeace, or groups of 'eco-

warriors', but from the United Nations, the European Union, the UK government, the British Bankers Association, insurance companies and pension funds. According to Bassey *et al.* (2013), the adverse environmental effect on economic development has become a matter of great public concern all over the world. Gradually, environment is becoming a much more urgent economic, social and political problems. Before now, it seems that the issue of environmental management was overlooked or considered less important in business management (Gray *et al.,* 1997). In recent times however, stakeholders have been compelled towards proactive strategy in managing the environment for business sustainability. The issues of environment and business relationship has formed a major concern in the heart of researchers, government, host communities and businesses. Companies with strong ESG practices always seem to perform better financially and are expected to be more resilient to ESG risks. Poor environmental behaviour may have a real adverse impact on the business and its finances. Punishment includes fines, increased liability to environmental taxes, loss in value of land, destruction of brand values, loss of sales, consumer boycotts, inability to secure finance, loss of insurance cover, contingent liabilities, lawsuits, and damage to corporate image (ACCA, 2015). Thus, environmental risk management affect nearly all aspects of business, including the financial and sustainability performance of the business entity.

Preserving a green environment, clean air, water and land are gaining greater importance than ensuring lower product prices for consumers, lower cost and consequently higher profits for business firms (Tapang, Bassey & Bessong, 2012). Host communities and consumers seem to be more willing to accommodate and pay for environmentally friendly products (Gray *et al.*, 1997). This new mind-set ultimately promotes sustainability of the environment. Here, sustainability refers to the long-term health of the global ecology; and sustainable environmental growth/benefit aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. The major responsibility falls on the corporate organizations in our communities to ensure that the environment is treated as an integral part of the economic process and not as free goods (Awasthi, 2009). A good number of previous studies have been conducted on the influence of environmental factors on corporate financial performance (Muhammad *et al.*, 2015; and Cai *et al.*, 2016). Also, Montabon *et al.*, (2007), Hatakeda *et al.*, (2012) and Nuzula, (2018) investigated the relationship between environmental factors and financial performance. Also, the measurements applied to quantify environmental performances are varied, from indexes developed by the third parties to quantitative and qualitative data gathered from the firms' annual social and environmental reports. Additionally, different proxies and measurement methods employed in the various studies lead to varying and inconclusive results of relations about environments and the firm's financial performances.

Despite the place occupied by environmental risk in oil and gas companies, there exist little empirical studies on the subject in Nigeria. The few studies conducted on the subject used questionnaire which were administered on employee whose view may not represent the views of the businesses, hence could not be used for reliable generalization. Others focused mainly on the overall social responsibility and firm's profitability, without considering immediate effect of environmental pollution and its risk management (Arong *et al.,* 2014; Acti *et al.*, 2013; and Tapang *et al.,* 2012). Thus, this study seeks to examine the impact of environmental factors on the financial performance of oil and gas companies in Nigeria

REVIEW OF LITERATURE

Environmental factors (ESG):

Environmental, Social and Governance factors usually called environmental factors are factors used to measure the company's sustainability and ethical impact of the company's operations. The E, of the ESG stands for environmental and is somehow the most critical with regard to the growing concerns around climate change and environmental issues. A common practice in addressing this issue is to lower greenhouse gas emissions and reduce carbon footprint. The environmental factors refer to impact on the environment such as it is carbon emissions, waste management, and deforestation practices. .Social factors do measure how well social issues such as employees, customers, local communities and human rights are addressed. On the other hand, governance factors refer to internal controls, executive compensation, and shareholders rights' Governance measures the effectiveness of leadership decision- making processes and management structures, and how it impacts the stakeholders. Companies with strong ESG practices always perform better financially and are expected to be more resilient to ESG risks. The common examples of Environmental, Social and Governance are:

Environmental: Climate change, Greenhouse gas emissions (GHG), deforestation, biodiversity, Pollution, water waste extended producer responsibility, etc

Social: Customer relations, employer relations, labour, human rights, occupational health, and safety, community relations**,** supply chains, etc

Governance: Board management practices, succession planning compensation, diversity, equity and inclusion, regulatory compliance, corruption, fraud, data hygiene and security

Environmental Management Pathway

The United Nations Organization (UNO) has done tremendous work on the issue of environmental activities in the different aspect concerning its conservation, sustainability, management, protection and control; and the overall impact on the World Economy. Prominently the data presented by the United Nation relates to promoting the integrity of the natural environment for the present and future generation. Substantial effort and resources have been deployed to ensure that our natural environment is not treated as a free good.

Historical Background on Environmental Regulation in Nigeria

Environmental regulation in Nigeria existed as window dressing before 1988. However, this changed because of an attempt by a foreign company, acting through an agent, to dump toxic waste in the Niger Delta region. This event shocked the Federal Government of Nigeria and highlighted the porous nature of environmental regulation in the country. This gave rise to the promulgation of Decree No.42 of 1988 by the former Federal Military Government of Nigeria. This decree made it a criminal offence for anyone to carry or dump any harmful waste within the entire land mass and waters of the Federal Republic of Nigeria. The episode gave rise to the need for an agency to oversee environmental protection; hence, Decree 58 of 1988 gave birth to the Federal Environmental Protection Agency (FEPA). Decree No 59 of 1992, granting the FEPA the responsibility for protection of the environment, biological diversity, conservation and environmental technology and research, later amended the Decree in 1992. It was this decree that created the first standards of environmental regulation in Nigeria. The standards include water quality, effluent limitation, air quality, atmospheric protection, ozone layer protection, noise levels and the control of hazardous substances. These represent the efforts made by successive administrations to ameliorate the environmental problems of the country. However, on May 29, 1999 the civilian government under President Olusegun Obasanjo added an impetus to the struggle against environmental menaces by according the environment a greater priority. To this effect, it created, for the first time in the history of Nigeria, the Ministry of Environment in June 1999. The former regulatory agency, the FEPA, was absorbed by the Ministry of Environment, which took over all its functions.

With this Agency, Nigeria could be said to be regulated environmentally, socially and health wise in comparison to some African countries. The regulatory laws are in full force and this has resulted in various forms of seizure and suspension of non-compliant firms. This also brought about the promulgation of such laws as: theFederal Environmental Prtection Agency Act No.88 of 1988 (Cap 131 LFN1990); The Harmful Waste(Special Criminal Provisions) Act of 1988 (Cap165 LFN 1990)

Financial Performance

For sustainability, companies need to earn profit in their operations. According to Pandey (2010), firm performance is an essential concept that connote the manner in which financial resources of a firm are prudently used to achieve its overall objective, thus, keeping the firm in business, and creating a greater prospect for future opportunities. Pandey (2010) stated that sufficient profit must be earned, to sustain the operations of the business, to be able to obtain fund from investors for expansion and growth, and to contribute towards the social overheads for the welfare of the society. The profitability ratios measure the operating efficiency of the company. Besides management of the company, creditors, and owners are also interested in the profitability of the firm. Creditors want to get their interest and repayment of principal as at when due. Owners want to get a required rate of return on their investment; this is possible only when the company earn enough profits, especially that of shareholders return because they are the last stakeholders to receive their return on investment. Based on above, this study used return on equity (ROE) and Return on Assets (ROA) as measures of financial performance.

Return on assets (ROE)

ROE is an accounting measure used to assess rates of return on total equity and has been used in previous studies to measure firm performance (Mwaniki *et al*, 2018). The shareholders are the last group to be settled in the sharing of corporate returns. The return on equity ratio, often used to measure the financial performance of firms, is a profitability ratio that measures the net income produced by equity assets during a period by comparing net income to the shareholders' fund. ROE gives an idea as to how efficient management is at using it's shareholders' fund to generate earnings (Pandey, 2010). In other words, the return on equity ratio or ROE measures how efficiently a company can manage its equity investment to produce profits during a period. The ROE figure gives investors, especially shareholders an idea of how

effectively the company is converting their money into net income. The higher the ROE number, the better, because the company is earning more shareholders' investment. Calculated by dividing a company's annual earnings by its shareholders' fund.

Return on assets (ROA)

ROA is an accounting measure used to assess rates of return on total assets and has been used in previous studies to measure firm performance (Gitman, 2008). The assets of the company are comprised of both debt and equity. Both of these types of financing are used to fund the operations of the company. The return on assets ratio, also called the return on total assets, is a profitability ratio that evaluates the profit of the firm based on the total assets during a specified period. ROA offers insight as to how efficient the management has used the business assets to generate earnings (Pandey, 2010). In other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a specific period. The higher the ROA number, the better, because the company is earning more money from the available assets. The return on assets ratio is calculated by dividing a company's annual earnings by its total assets.

Theoretical Framework:

Stakeholders Theory: The basic proposition of the stakeholders' theory is that the firm's success is dependent upon the successful management of all the relationships that a firm has with its stakeholders, a term originally introduced by Stanford research institute (SRI) to refer to those groups without whose support the organization would cease to exist (Freeman, 1983).

In developing the stakeholder theory, Freeman (1983) incorporates the stakeholders' concept into categories: (i) a business planning and policy model, and (ii) a corporate social responsibility model of stakeholder management. In the first model, the stakeholder analysis focus on developing and evaluating the approval of corporate strategies decisions by groups whose support is required for the firm has continued existence. The stakeholders identified in this model include the owners, customers, public groups and suppliers. Although these groups are not adversarial in nature, their possibly conflicting behaviour is considered a constant on the strategy developed by management to best match their firm's resources with the environment (Deegan and Gordon, 1966).In the second model, the corporate planning and analysis extends to include external influences that may be adversarial to the firm. These adversarial groups may include the regulatory environmentalist and/or special interest groups, like host communities concerned with social and environmental issues (Guthrie and parker, 1990). The second, model enable managers and accountants to consider a strategic plan that is adaptable to change in the social demands of non-traditional stakeholders' groups. The stakeholder's theory proposed an increased level of environmental awareness, which creates the need for companies to extend their corporate planning to include the non-traditional stakeholders like the host communities and regulatory adversarial groups in order to adapt to changing social demands (Trotman, 1999).

Legitimacy Theory: The legitimacy theory is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values and definitions (Suchman, 1995). According to Tilling (2008), legitimacy theory offers a powerful mechanism for understanding voluntary social and environmental disclosure made by corporations, and that this understanding would provide a vehicle for engaging in critical public debate. The problem for legitimacy theory in contributing to the understanding of accounting disclosures specifically and as a theory in general is that the term has an occasion being fairly loosely. This is not a problem of the theory itself, and the observation could be equally applied to a range of theories in a range of disciplines.

The theoretical perspective provided by legitimacy theory assumes there is a relationship between an organisation and the society in which it operates. Pfeffer and Salancik (1978) explain that organisations consume the society's resources, and society evaluates them on the usefulness and legitimacy of their operations. Organisations subject to the evaluation may attempt to achieve 'congruence between the social values associated with or implied by their activities and the norms of acceptable behaviour in the larger social system of which they are part (Dowling & Pfeffer 1975). The congruence, if achieved, between the perceived social values and norms may justify to society an organisation's right to continue to operate. This is the process of legitimation. However, when an actual or potential disparity exists between the two value systems, there will exist a threat to organizational legitimacy (Dowling & Pfeffer 1975). A threat may mean the cancellation of an implicit social contract under which organisations gain their licence to operate.

Empirical Review

Nuzula (2019) assessed the effect of Environmental Risk on Firms' Financial Performance. The study assumed that the level of environmental risk is affecting the companies' profitability. Using panel data

from 1085 companies from Indonesia, Thailand, Singapore, Malaysia, Philippines, and Vietnam from 2013 to 2015, the study applies Ordinary Least Square (OLS) to examine whether the environmental risk is affecting profitability, proxied by return on assets (ROA). The result indicated that environmental risk management does not make any significant change in return on assets (ROA). However, including control variables such as industry, country, year, and total assets, the study established a significant effect of environmental risk management on return on assets.

Tarmuji *et al.* (2016), studied the impact of environmental, social and governance practices (ESG) on economic performance: evidence from ESG Score. The aim of the paper was to investigate the impact of Environmental, Social and Governance (ESG) practices on economic performance. The study used a sample of non-financial data from two countries (Malaysia and Singapore) for the period of 2010–2014 from ASSET database of Data-Stream, by Thomson Reuters Inc., the world's leading source of intelligent information for businesses and professionals. The database search revealed a total of 80 companies, which comprises of 35 companies in Malaysia and 45 companies in Singapore disclose on ESG practices. The data were subject to constant disclosure over the period of 2010 to 2014. The study contributes to the existing literature on ESG practices and its relationship with economic performance utilizing panel data that expand into international perspective. The study suggests that social and governance practices significantly influence economic performance. The result of the study reveals that environmental practices for both countries are significantly positively correlated with economic performance. Moreover, the study found that corporate environmental practice has no significant influence on economic performances in both countries. The study predicted that social responsibility practices has significant impact on the economic performance, that is, social practices significantly influence economic performance for companies in Singapore but not in Malaysia.

Moreover, Arong *et a*l (2014) study the effect of environmental cost management on the profitability of oil sector in Nigeria from 2004 to 2013. Data used were obtained from the Central Bank of Nigeria (CBN). Multiple Regression Analytical Technique was employed. The study indicates a significant relationship between influence of environmental management cost and the profitability of oil sector.

Acti *et al* (2013) examined the impact of environmental cost on corporate performance of oil companies in the Niger Delta States of Nigeria. Field survey methodology was employed, involving a selected sample of twelve oil companies. Multiple regression analysis was explored to test the hypothesis. The result reveal that environmental cost and corporate performance is significantly related.

METHODOLOGY

Ex-post-facto research design was adopted in this study. The proposed population of study in this research were twelve oil and gas companies listed on the Nigerian Stock Exchange Market. Using sampling method, 50% of the population were used , that is, six companies. This is in line with the suggestions of Kerjice and Morgan (1970) as cited in Uwaloma (2011), Sharifah *et al.* (2008), that 50% of a defined population is considered as an adequate sample size required for generalization. Thus, 50% of the study population is calculated and approximated to the nearest whole number using the following formula:

$$n = \frac{50}{100} x P$$

Where: n = sample size, and P = population of the Study

The data for this study were extracted from various corporate publications such as annual reports and independent/stand-alone reports (like sustainability reports) of the selected firms and the market reports.

Model Specification :This study adopted and adjusted the model of Nuzula (2019), which is specified as follows:

Fin Perf = $\beta_0 + \beta_1 (EnvSc)_t + \beta_2 (Indus)_t + \beta_3 (Country)_t + \beta_4 (Year)_t + \beta_2 (Size)_t \mu$ ....(i) **Where:**

Fin Perf = Financial performance measured by return on assets (ROA) and Tobin's Q

EnvSc = Environmental Score; Indus= Industry categories; country= country; and

Year= Year; while size= Firm capacity measured by the number of total assets.

In modifying the above model to suit this study, the industry, country and year variables were discarded. This is because this study considers only one industry in a particular country within the same time frame. The models proposed for this study are:

Model 1.

The first model was used to test hypotheses 1 of this study. It Investigated the influence of corporate environmental score on return on assets (ROA) of oil and gas companies in Nigeria.

Model 1 is specified thus:

ROA = $\beta_0 + \beta_1 (EnvSc)_t + \beta_2 (FS)_t + \mu$ .... (i)

Where: ROA=Return on Assets; EnvS=Environmental Score; FS= Firm Size (Log of total assets); $\beta_0 - \beta_2$ =Are the parametersand μ = Stochastic factor/error term.

Model 2.

Model 2 was used to test hypotheses 2 of this study. It ascertained the impact of corporate environmental score on return on equity (ROE) of oil and gas companies in Nigeria.

$$ROE = \beta_0 + \beta_1 (EnvS)_t + \beta_2 (FS)_t + \mu \quad \text{(ii)}$$

Where: ROE=Return on Equity.

Description of Research Variables:

Dependent Variables: Return on Equity: The return on equity (ROE) is one of the key profitability measures that a business enterprise publishes annually. The return on equity measures the efficiency with which a firm utilizes capital raised by its shareholders to grow and dictate remuneration to be paid to shareholders in form of dividends or interests. It is calculated by dividing net income by net worth.

Return on Assets: the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a specific period. The higher the ROA value, the better, because the company is earning more money from the available assets. The return on assets ratio is calculated by dividing a company's annual earnings by its total assets.

Independent Variables: Environmental Score: indicates the level of ecological risk as measured by content analysis of the annual and sustainability reports of the oil and gas companies. The higher the number of environmental scores, the higher the possibility costs of environmental risk management. Environmental score customises the severity of a vulnerability to an asset specific to the program's organization setting this score helps one to visualize how severe the vulnerability to an asset is to an organization. It can be determined by setting impact levels to 3 metrics: confidentiality, integrity and availability. In other words, the three environmental score components are confidentiality, integrity and availability. The ESG scores are so essential a tool for investors to assess a company's sustainability and ethical performance. Such scores do range between0 to 100 and a score below 50 is considered relatively poor while score from and above 70 is considered good (S&P Global, 2023)

Firm Size: This measures the capacity of the firm by using the total assets of the firm.

Descriptive statistics and inferential statistic - Multiple regression analysis were used in this study.

The descriptive statistic technique was used to summarize and describe the information (data) collected. These give a quick lookup insight and explain the trend and pattern in the board features and corporate sustainability performance across the sectors of the Nigerian Stock Exchange Market.This study used the Regression Analysis to investigate the impact of environmental factors on the financial performance of oil and gas companies in Nigeria. The panel data ordinary least square was the main analytical technique employed in this study. Three models: the Pooled Regression Model, Fixed Effect Model and Random Effect Model were employed for the estimation. The estimators' goodness of fit were tested using the Hausman Test, adjusted multiple coefficients of determination (adjusted R^2) and the F-statistics.

RESULTS AND DISCUSSIONS

The data used in this study were extracted from the various annual reports of the sampled oil and gas companies from 2010 to 2019.The data used for this study is as shown in Appendix A below.

The descriptive statistics was conducted to have a first insight into the nature of the individual variables used for this study. The table below reveals the descriptive analysis.

Table 1: Descriptive Analysis

Variables	Mean	Maximum	Minimum	Std. Dev.
ROA	0.022412	0.088047	-0.171899	0.047309
ROE	0.022551	0.183235	-0.904607	0.163668
ENVS	0.363833	1.010000	0.090000	0.232810
FS	7.221048	7.762357	6.738430	0.260671

Source: Formatted by researcher from EViews Descriptive result

From Table 1, the mean value of ROA implies that the average return on assets for the 6 oil and gas companies from 2010 to 2019 is 0.022412. This implies that in ten (10) years, the average rate of all investors fund utilization is 0.022412. This implies that for every one-naira value of assets, earning is an average of 0.022 naira across the 6 companies in 10 years. The table also indicates that the minimum value of return on assets recorded across the companies in the studied years is -0.171899, while the maximum

value is 0.088047. The standard deviation indicates that the variation from the mean value of return on assets is 0.047309.
Secondly, the mean value of ROE indicates that the average return on equity is 0.022551. This suggests that each one naira of the shareholders' fund was able to earn about 0.022551 naira on average across the 6 companies in 10 years. The minimum and maximum values of return on equity across the companies in 10 years is -0.904607 and 0.183235 respectively. These financial performance indicators suggest that on average the oil and gas companies are profitable, since the average values of the financial performances are positive.
Also, descriptive statistic indicates that the mean value of Environmental Score (EnvS) is 0.363833. Indicating that the average environmental score of the selected oil and gas companies from 2010 to 2019 is 0.363833. The minimum and maximum values of environment score in the Nigerian oil and gas companies is 0.09 and 1.01 respectively. The environmental score recorded a standard deviation of 0.232810.
Lastly from the descriptive statistics table, the mean value of firm size (FS) is 7.221048. The firm size which is the control variable indicates that the average log of total assets of the oil and gas companies in Nigeria is 7.22. The firm size (FS) standard deviation is 0.260671. This implies that the variation in the log of total assets of the oil and gas companies studied is low and account for stability in the firm size.

The inferential statistics results were used here for hypotheses testing. To investigate the impact of environmental factors on the financial performance of oil and gas companies in Nigeria, this study employed the panel data models: Pooled regression model, fixed effects model and Random effects model in testing the two hypotheses. The best estimator among the models was determined by Hausman Test in addition to R- squared, Adjusted R-squared, F-statistics and its Probability value.
In theoverall econometric model, generally, pooled OLS estimator ignores the panel structure of the data and simply estimates the parameters and its usual standard errors are incorrect (Kurt, 2015). Thus, by pooling the data, the pooled regression model denies the heterogeneity or individuality that may exist among the companies in the study. Based on this fact, this study could not give much consideration to the pooled regression model. Secondly, the Fixed effects or LSDV Model allows for heterogeneity or individuality. While the Random effects model have a common mean value for the intercept. The most appropriate model between the fixed effects and random effects models is always determined by the Hausman Test. In the Hausman test, the Decision Rule according to Green (2008) is stated thus:
Null Hypothesis: The Random Effects Model is Preferred (or is most appropriate)
Alternate Hypothesis: The fixed Effects model is preferred (or is most appropriate)
Model 0ne
HO_1: ***Corporate environmental score has no significant impact on the return on assets of oil and gas companies in Nigeria.***

Table 2: Econometrics Estimates for Model 1

Variables	Fixed Effect	Random Effect++	Pooled Model
ENVS	0.123587 (5.063476)**	0.131187 (6.28058)**	0.131187 (6.300375)**
FS	0.031478 (1.389152)	0.013117 (0.70312)	0.013117 (0.705337)
C	-0.249856 (-1.549069)	-0.120036 (-0.903383)	-0.120036 (-0.906231)
R-Squared	0.493253	0.448012	0.448012
Adjusted R-squared	0.425037	0.428644	0.428644
F-Statistic	7.230753**	23.13157**	23.13157**
Durbin-Watson stat	2.46357	2.240424	2.240424

Source: Formatted by researcher from EViews result of regressions
****, ** and * represent 1%, 5%, and 10% significance levels respectively.*
Figures in brackets are t- statistics values.
++ = lead equation.
Dependent variable: Return on Assets (ROA)

Table 3: Hausman Test Result for Model 1

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		2.054116	2	0.358
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
ENVS	0.123587	0.131187	0.000159	0.5472
FS	0.031478	0.013117	0.000165	0.1534

Source: Researcher's Computation Using EViews 10

Based on the probability of the Hausman test presented in Table 3 above, the random effects model is preferred, since the probability value (0.358) is greater than 0.05. Meaning that the study accepts the null hypothesis of Hausman test, which states that a random effect is preferred. Therefore, based on the Hausman test, Adjusted R-squared and the Durbin Watson Statistics, the random effects model has been accepted as the most appropriate estimator for this study - the impact of environmental factors on the financial performance of oil and gas companies in Nigeria.

Based on the random effects econometrics estimate presented in table 2 above, the value of R-squared (R^2) is 0.448012. Meaning that about 44.80% of the total variations observed in the dependent variable (Return on Assets (ROA)), is explained by the independent variables (Environmental Score (EnvS) and Firm Size (FS)). This implies that environmental score variables explained about 44.80% of the total variations observed in the return on assets in oil and gas companies. Considering the result presented in table 4.3, the adjusted R-squared of the random effects model is 0.428644; implying that the unbiased explained proportion of the total variations observed in the dependent variable by the independent variables is about 42.86%. This means that environmental score while being controlled by firm size explained about 42.86% of the total variations observed in the return on assets in oil and gas companies. Simply put, environmental score has about 42.86% influences on return on assets of oil and gas companies in Nigeria.

To test if this influence is statistically significant, the F-statistics was considered and the value of the F-statistics of the random effect model of table 4.3 above shows that the overall goodness of fit of the model is acceptable. It equally indicates that the influence of environment score on return on assets is statistically significant, since the probability value (0.00000) of the F-statistics (23.13157) is less than 0.05 significance level. Therefore, the study concludes that corporate environmental score has significant impact on the return on assets of oil and gas companies in Nigeria.

The Durbin-Watson Statistics of random effects model further supported the goodness of fit of the model and indicates that there is no evidence of autocorrelation in the model; since the value of Durbin-Watson Statistics 2.240424 is greater than the coefficient of multiple determination (R^2) and lies within the acceptable region of 1.5 to 2.5 (Gujarati, 2004). Here, the study concludes that there is no evidence of autocorrelation and that the random effect model is fit for this study.

Conclusively, the random effect model also indicates that the coefficient of environmental score (ENVS) is 0.131187 meaning that a unit increase in environmental score will lead to about 0.131187 proportional increase in return on assets of oil and gas companies in Nigeria. It equally indicates that the impact of environmental score on return on assets is positive. The t-test value of 6.280580 with probability value of 0.0000 indicates that the positive impact of environmental score on return on assets is statistically significant at 5%, since the probability value is less than 0.05. Hence, the study concludes that environmental score has positive and significant impact on return on assets of oil and gas companies in Nigeria. The estimate equally revealed that the firm size plays positive role in the outcome of the financial performance of oil and gas companies in Nigeria because the coefficient is positive, however the positive role is not statistically significant since the probability value is greater than 0.05.

Model 2

HO_2: Corporate environmental score has no significant impact on the return on equity of oil and gas companies in Nigeria.

Table 4: Econometrics Estimates for Model 2

Variables	Fixed Effect	Random Effect++	Pooled Model
ENVS	0.345139 (3.493401)**	0.34571 (4.088811)**	0.34571 (4.158622)**
FS	0.116734 (1.272677)	0.042374 (0.561153)	0.042374 (0.570734)
C	-0.945962 (-1.448877)	-0.409218 (-0.760839)	-0.409218 (-0.77383)
R-Squared	0.306268	0.26488	0.26488
Adjusted R-squared	0.212881	0.239086	0.239086
F-Statistic	3.279558**	10.26918**	10.26918**
Durbin-Watson stat	2.388933	2.26905	2.26905

Source: Formatted by researcher from EViews result of regressions

****, ** and * represent 1%, 5%, and 10% significance levels respectively.*

Figures in brackets are t- statistics values.

++ = lead equation.

Dependent variable: Return on Equity (ROE)

Table 5: Hausman Test Result for Model 2

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		2.289181	2	0.318
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
ENVS	0.345139	0.34571	0.002612	0.9911
FS	0.116734	0.042374	0.002711	0.1532

Source: Researcher's Computation Using EViews 10

In Table 5 above, looking at the HausmanTest p-value (0.318), the random effects model is preferred, as it is greater than 0.05. Meaning that the study accepts the null hypothesis of Hausman test, which states that random effects is preferred. Also, based on the Hausman test, Adjusted R-squared and the Durbin Watson Statistics, the random effects model has been accepted as the most appropriate estimator for this study - the impact of environmental factors on the financial performance (return on equity) of oil and gas companies in Nigeria.

In Table 4 above, looking at the random effects econometric estimate, the value of R-squared (R^2) is 0.264880. Meaning that about 26.49% of the total variations observed in the dependent variable (Return on equity (ROE)), is explained by the independent variables (Environmental Score (EnvS) and Firm Size (FS)). This implies that environmental score variables explained about 26.49% of the total variations observed in the return on equity in oil and gas companies. The adjusted R-squared of the random effects model is 0.239086. This means that environmental score while being controlled by firm size explained about 23.91% of the total variations observed in the return on equity in oil and gas companies. Hence, environmental score has about 23.91% influences on return on equity of oil and gas companies in Nigeria.

The value of the F-statistics of the random effect model in table 4.5 shows that the overall goodness of fit of the model is acceptable. It equally indicates that the influence of environment score on return on assets is statistically significant, since the probability value (0.000155) of the F-statistics (10.26918) is less than 0.05 significance level. Therefore, the study concludes that corporate environmental score has significant impact on the return on equity of oil and gas companies in Nigeria.

The Durbin-Watson Statistics of random effects model further supported the goodness of fit of the model and indicates that there is no evidence of autocorrelation in the model; since the value of Durbin-Watson Statistics 2.240424 is greater than the coefficient of multiple determination (R^2) and lies within the acceptable region of 1.5 to 2.5 (Gujarati, 2004). Here, the study concludes that there is no evidence of autocorrelation and that the random effect model is fit for this study.

Conclusively, the random effect model also indicates that the coefficient of environmental score (ENVS) is 0.345710. This implies that a unit increase in environmental score will lead to about 0.345710 proportional increases in return on equity of oil and gas companies in Nigeria. It equally indicates that the impact of environmental score on return on equity is positive. The t-test value of 4.088811 with probability value of 0.0001 (see appendix H) indicates that the positive impact of environmental score on return on equity is statistically significant at 5%, since the probability value is less than 0.05. Hence, the study concludes that environmental score has positive and significant impact on return on equity of oil and gas companies in Nigeria. The estimate equally revealed that the firm size plays positive role in the outcome of the financial performance of oil and gas companies in Nigeria. This is because the coefficient is positive, however the positive role is not statistically significant since the probability value is greater than 0.05.

The statistical results of this study shows that environmental factors have a significant and positive impact on return on assets and return on equity of oil and gas companies in Nigeria. These results indicate that the benefits of adopting environmental activities exceed the cost derived from implementing them. Therefore, investment in environmental practices could produce a win-win situation, as suggested by Sarfraz *et al* (2018) These findings are consistent with the instrumentality of stakeholder theory. The result of this study is in line with the findings of Manrique & Martí-Ballester (2017), Tarmuji *et al* (2016) and Tapang *et al* (2012). Environmental factors have been increasingly viewed as a valued feature of a well-run company and significant component of modern-day businesses (Manrique & Martí-Ballester, 2017). This study investigated the impact of environmental factors on the financial performance of oil and gas companies in Nigeria.Environmental Score eventually had positive and significant impact on both the return on assets (ROA) and on return on equity (ROE). Generally, therefore, the random effects econometric model used in this study indicates that environmental score has positive and significant impact on financial performance of oil and gas companies in Nigerian. On the specifics, the following are the findings of this study: (i) Environmental score has positive and significant impact on return on assets (ROA) of oil and gas companies Nigeria.(ii)Environmental score has positive and significant impact on return on equity (ROE) of oil and gas companies in Nigeria.

CONCLUSION AND RECOMMENDATIONS

Recently, there is a growing concern about businesses that their contribution to environment wellness and how their environmental practices have affected the financial performance. However, the fact remains that there are mixed results from the available studies. Having used a panel data methodology covering 6 oil and gas companies in Nigeria for ten (10) years period from 2010 to 2019, this study concludes that the random effect econometric estimator employed in this study shows that environmental score had positive and significant impact on financial performance of oil and gas companies in Nigeria.

On the other hand, since a positive and significant relationship was established between environmental score and financial performance, measured by return on assets (ROA) and return on equity (ROE) - this study recommends that companies, especially the oil and gas companies should incorporate and improve on their environment practices to enhance financial benefit attached to environmental good practice.

Furthermore, the study recommends that further investigation into the impact of environmental factors on financial performance in other sectors of the economy will help to establish the relationship between the environmental factors and financial performance in such sector. This will in turn assist government in policy making decisions especially in strategic development and modelling of business operations and investments.

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Appendix A: Data Used for the Study

Oil Companies	Year	ROA	ROE	EnvS	FS
TOTAL NIGERIA PLC.	2010	0.02252	0.03002	0.29	6.98973
	2011	0.06406	0.15996	0.43	6.92238
	2012	0.03398	0.10578	0.33	6.8914
	2013	-0.1719	-0.9046	0.09	6.85529
	2014	0.01202	0.00913	0.24	6.93619
	2015	0.03763	0.18324	0.35	7.76236
	2016	-0.0254	-0.0874	0.14	7.62033
	2017	0.03968	0.10851	0.36	7.54268
	2018	0.03721	0.13399	0.35	7.45568
	2019	-0.0043	-0.0019	0.2	7.46561
FORTE OIL PLC.	2010	0.02154	0.04851	0.28	6.78617
	2011	-0.0221	-0.0571	0.18	6.73843
	2012	0.0568	0.09167	0.4	7.33361
	2013	0.01116	0.0264	0.24	6.78329
	2014	0.03238	0.05043	0.33	6.78749
	2015	0.03601	0.04855	0.34	6.82376
	2016	0.05594	0.11214	0.39	7.27395
	2017	0.05764	0.1229	0.41	7.3811
	2018	0.05941	0.11714	0.43	7.39867
	2019	0.05904	0.07821	0.42	7.39593
ETERNA PLC.	2010	0.06599	0.15721	0.44	7.17303
	2011	0.04776	0.13377	0.39	7.14496

	2012	0.02416	0.07209	0.3	7.07216
	2013	-0.0224	-0.0552	0.17	7.02868
	2014	0.02062	0.03581	0.26	7.00898
	2015	0.02003	0.02558	0.25	7.15352
	2016	-0.0346	-0.2317	0.14	7.12752
	2017	0.00875	0.01518	0.24	7.07329
	2018	-0.0661	-0.2012	0.14	6.99115
	2019	0.00652	0.00816	0.22	6.95258
OANDO PLC	2010	0.02585	0.06945	0.32	7.53484
	2011	0.02154	0.04686	0.29	7.45924
	2012	-0.0073	-0.0355	0.19	7.43597
	2013	0.03574	0.04141	0.33	7.38052
	2014	-0.0661	-0.1738	0.14	7.3175
	2015	0.02494	0.02999	0.31	7.16103
	2016	0.04704	0.11635	0.39	7.15981
	2017	-0.1276	-0.3796	0.13	7.14
	2018	0.03651	0.07574	0.34	7.05957
	2019	0.03584	0.06491	0.34	7.04046
SEPLAT PETROLEUM DEVELOPMENT COMPANY PLC	2010	0.04439	0.04559	0.27	7.02309
	2011	0.02109	0.07097	0.27	7.02056
	2012	0.02179	0.09572	0.37	7.02305
	2013	0.02099	0.04058	0.29	6.99558
	2014	0.01557	0.03117	0.24	6.94834
	2015	0.08109	0.07055	0.42	7.34664
	2016	0.08145	0.13415	1.00	7.38349
	2017	0.07966	0.14492	1.00	7.33711
	2018	0.05801	0.13917	1.01	7.32406
	2019	0.07796	0.10025	1.00	7.32739
MRS OIL NIGERIA PLC.	2010	0.08805	0.17927	1.01	7.53484
	2011	0.06983	0.15583	0.99	7.45924
	2012	0.04624	0.09417	0.37	7.43597
	2013	-0.0004	-0.0331	0.22	7.38052
	2014	0.04272	0.0579	0.37	7.3175
	2015	0.04214	0.04769	0.37	7.76236
	2016	-0.0125	-0.2096	0.19	7.62033
	2017	0.03089	0.03732	0.32	7.54268
	2018	-0.044	-0.1791	0.14	7.45568
	2019	0.06919	0.1385	0.45	7.46561

Source: Various Annual Report of the Sample Oil and Gas Companies from 2010-2019

FINANCIAL INCLUSION AS A PANACEA FOR RESTRUCTURING HOUSEHOLD WELFARE IN NIGERIA: A SURVEY OF ABAKALIKI METROPOLIS, EBONYI STATE, SOUTH-EAST OF NIGERIA

[1]Anyanwu Kelechi C., [2]Uwazie Iyke U., [1]Ohalete Precious and [1]Ikoro, Wisdom O.
[1] Alex- Ekwueme Federal University, Ndufu Alike IkwoAbakiliki, Ebonyi State
[2] Michael Okpara University, Umudike Umuahia, Abia State.

ABSTRACT
This study examined financial inclusion as a way of helping to restructure household welfare in Abakaliki, Ebonyi state using a cross-sectional data from a well- structured questionnaire for 203 household. The motivation for this study is that Ebonyi State happens to be the only south-east states with the highest level of poverty rate while the main objective is to examine the relationship between financialinclusion and household welfare in Abakiliki, Ebonyi State. Logit and ordinary least square regression model were adopted. From our analyses, it was discovered that only variables such as Literacy, Gender, Household size and Income, had significant effect on household welfare in Abakaliki, Ebonyi state capital town. Also, Household size and income, education and access to banks, are significant determinants of Financial Inclusion. Based on the result, financial Inclusion has no significant Impact on household welfare improvement in Abakaliki. Therefore, a policy framework that encourages sensitization programmes (Seminars and training on access and usage of finance) on the need for financial inclusiveness should be encouraged by the local and state government.
Keywords: Financial Inclusion, Restructuring, Household, Welfare, Survey, Cross Sectional

INTRODUCTION

According to Harihan and Marktanner (2013), the notion of financial inclusion (FI) has continued to attract global attention in the field of development economics research throughout the years, owing to its capacity to propel the growth and durability of an economy and its implications for the well-being of individuals. Ibeachu (2010) perceived financial inclusion as the process of ensuring accessibility to financial services and timely, sufficient credit where required by vulnerable segments such as disadvantaged groups and individuals with low incomes at a reasonable expense. The advantages of an inclusive financial system encompass an effective allocation of productive resources, abatement of capital costs, enhancement in the day-to-day management of finances, amelioration in welfare, and diminution in reliance on informal credit sources (Sarma & Paris, 2008).

Lawrence (2016) argues that the global exclusion of millions of individuals from financial services can result in the potential loss of deposits, savings, and investible funds, leading to a decrease in the capacity of the global economy to generate wealth. Rabobank (2015) acknowledges that approximately four billion people in developing countries and emerging economies lack access to financial services. The importance of access to financial services in promoting credit creation and facilitating capital accumulation is widely recognized. Therefore, it encourages investment levels and economic activity within a nation. Sanusi (2011) agrees that the high prevalence of poverty and hindered welfare in Nigeria is attributed to the increasing number of financially excluded individuals. It is noted that achieving an optimal level of financial inclusion is essential for enhancing growth, increasing GDP, and improving economic sustainability and development in Nigeria. According to the research conducted by Terfa and William in (2015) cited in CBN (2013), the estimated population of Nigeria is approximately 174.51 million (2013 estimate) and has a population growth rate of 2.6 percent, while 46.3% of the adult population are excluded from financial services with women accounting 54.4% of the excluded population and about 80.4% of the financially excluded population resides in rural areas.

The progress made in financial inclusion in Africa is commendable. However, it is important to recognize that a major obstacle to further advancement is the limited availability of consistent and reliable data. This scarcity of data hampers the ability to comprehensively analyze and understand the variation in financial inclusion both across and within countries. Also, Olaniyi and Olaniyi (2017), as cited by Eflina (2016) reveal that a significant number of adults in Nigeria approximately 34.9 million representing 39.7 percent of the adult population are financially excluded. Conversely, only 28.6 million adults accounting for 32.5 percent of the adult population have access to banking services. The question this paper seeks to ask is to

what extent does financial inclusion reflected on household welfare? as welfare is viewed from the aspect of the state of per capita expenditure. The World Bank global financial development report (2014) finds that financial inclusion plays a central role in development and poverty reduction. Hence providing access to financial services is increasingly becoming the area of concern for every policymaker, for obvious reasons it has been a far-reaching economic and social implication.

In Nigeria and other developing economies, the provision of financial services is influenced by issues such as physical accessibility, affordability, and eligibility (Rabobank, 2015). In circumstances where financial services can be accessed, low-income individuals and small and medium-sized enterprises may encounter challenges in accessing these services due to the reluctance of formal financial intermediaries, such as commercial banks, to serve impoverished households. This reluctance is driven by the high cost of handling small transactions, absence of traditional collateral, lack of fundamental financing requirements, and geographical constraints (Poliquit, 2006). To address these barriers, it becomes imperative to foster the financial autonomy and self-development of impoverished households and entrepreneurs in rural areas. By doing so, these households and small businesses can leverage their savings or earnings to enhance their productivity, thereby stimulating their income growth. Consequently, this can generate employment opportunities and ultimately contribute to overall economic expansion, as both production quantity and quality of life experience significant enhancements. Government and development agencies in the past have implemented policies and initiatives aimed at enhancing financial inclusion for individuals who have not been catered to by the formal financial sector. In 2012, the Central Bank of Nigeria (CBN) introduced the national financial inclusion strategy with the primary objective of expanding access to a wide array of financial services, including payment options, savings accounts, remittance services, pension plans, insurance coverage, and affordable credit options for consumers (Sanusi, 2012). Furthermore, the collateral registry was launched as an online platform in May 2016, enabling micro, small, and medium enterprises (MSMEs) to secure loans using assets such as machinery, livestock, and inventory. This initiative was established in response to the fact that many SMEs lack traditional forms of collateral like land and buildings (The World Bank, 2016). However, despite these efforts, certain obstacles still hinder the effective implementation of the aforementioned policies.

The welfare of the household has been with a severe threat in the last few decades in Nigeria. According to the National Bureau of Statistics (2015) about 71% of Nigeria population was living below the poverty line and in 2010, 60.9% of Nigerian were living in absolute poverty (Mou, 2016). When viewed from the past, poverty in Nigeria has continued to rise from 27% in 1980 to 46% in 1985 which shows dampen welfare of poor masses (Ogwunike, 2002). (Note absolute poverty in this contest is viewed as a minimum requirement necessary to afford a minimal standard of food, clothing, healthcare, and shelter). The Oxford Poverty and human development indicator (2017) revealed that 26.6% of Nigeria over 51.3million is destitute in 2015, while 68.0% and 84% of the Nigerian population live below $1.25 per day and $2 per day respectively which shows the extent at which the household welfare is battered.

According to National Bureau of Statistics (2023), Ebonyi State remains the only south-east state in the first ten poor states in Nigeria with over 79.76 % of the dwellers considered to be poor which kept them on the fourth position from the top in the state poverty rank table. Both people living in the urban and rural area of Ebonyi state lack access to clean water and most of the families in the rural area do not benefit from economic growth in Nigeria which implies uneven distribution of income and wealth. Higher labour demand and supply gap created more income inequality problems and also the high poverty percentage among less educated families were fundamental economic problems not yet quantified (Chukwu, 2012).

Notwithstanding, financial inclusion is considered one of the first steps in improving the lives of the poor. Therefore, extending well-functioning and inclusive financial services offer an opportunity for the poor to have access to savings, payment and credit services, which give them the chances to invest in education and small businesses thereby reducing income inequality and poverty. Ousmane, Ismaeel and Aliyu (2017) concur that access to finance is considered as one of the first steps in improving the lives and welfare of the poor. Rabobank (2015) opine that FI enables the poor to increase and diversify income, build human, social and economic assets and improve their lives in ways that relief the multi-dimension aspect of poverty. Ugwuanyi (2012) stated that access to credit has a positive impact on household welfare. In addition, providing financial service to the poor is a tool for economic development and poverty reduction (Quach *et al.*, 2005).

Researchers have shown that access to finance can alleviate poverty and improve the wellbeing of households but [poliquit (2006), mwanyi and Sichei (2012), Hariharan and Marktanner (2012) and Ebimobower *et al.* (2012)] attest that financial inclusion alone cannot reduce poverty and improve welfare

in any society but existence of social overheads capitals and basic amenities like roads, bridges, steady power supply, security, and good transportation also contributes to access to finance.
Therefore, the Abakaliki town in Ebonyi state was chosen as a case study to investigate that given the level of socioeconomic factor and infrastructure, if financial inclusion has an impact on the improvement of household welfare in Abakiliki Ebonyi state or not.

LITERATURE REVIEW

Financial inclusion: literary it refers to access to finance. Hariharan and Markianer (2012) defined financial inclusion as an access to formal financial services such as credit, savings, and insurance opportunities. Sarma (2008) sees it on the cruise with which financial services could be ascertained coupled with their accessibility and affordability. Also, Fungacova and Well (2014) viewed the concept around the bracket of the utility rather than quality of services provided. There is no universally accepted definition of financial inclusion since the term is multidimensional in nature and varies depending on the specific agenda of countries, Athanasius and Meshach (2017). However, the concept of financial inclusion, therefore, stretches beyond improving access to credit but includes facilitating access to savings, enhancing risk management and ensuring the development of an efficient financial infrastructure as it reflects and improves the protection of consumer rights and welfare (AFDB 2013, p25).

Household: It refers to as the smallest economic unit. Havilland (2003) opines that a household consists of one or more people who live in the same dwelling and also share meals or living accommodation and may consist of a single family or some other group of people. A single dwelling will be considered as containing multiple households if either meals or living space are not shared.

Welfare: Welfare is multidimensional in nature but in the aspect of economic welfare is the level of prosperity and standard of living of either an individual or a group of persons. Also, it is referred to as utility gained through the achievement of material goods and services that is part of social welfare that can be fulfilled through economic activity (Samuel and Wiliam 2004).

Brief History of Financial inclusion

The history of financial inclusion in Nigerian dated back to 1976 with the constitution of a 14 member committee under the Head of a distinguished economist, Dr Pius Okigbo which among all things examine the adequacy, relevance or otherwise of the structure of Nigeria financial system in order to meet the needs of the economy for rapid development (Okigbo *et al.,* 1976).

Rural banking scheme was introduced in 1977 to promote the habit of banking among the rural population, harness savings, enhance delivery of credit to the active rural poor and reduce the flight of both funds and people from rural to urban area (Okafor, 2011). The programme was re-launched in Nigeria in 2012 as a financial inclusion strategy for the promotion of enhanced economic growth and development (Okey *et al.*, 2016)

According to Elfma (2010), there are five major barriers to financial inclusion namely, physical access, financial access, financial literacy, affordability, and eligibility.

Theoretical Literature Review

Loanable Funds Theory

Loanable fund theory was formulated in the 1930s by the British economist Demic Robertson and Swedish Economist Bertil Ohlin. The theory was an extension of Wicksell theory of interest rate by Swedish economist Knut Wicksell in the year 1898. The concern of this theory is that the interest rate is ascertained by the forces of demand and supply of loanable fund. It means that interest rate is the cost of credit, which is controlled by the demand and supply for loanable funds (Tsiang, 1956). Jhingan (2010) reviews the forces associated with the demand and supply of loanable funds.

Demand of Loanable Funds: Loanable funds are the demand by three agents that is government, entrepreneur (investors) and consumers who require it for three basic purposes; investment, hoarding, and dis-saving. The government demands it for social or public expenditure, the investors demand it to acquire capital and consumers demand it for basically consumption. In the case of an investor, if the rate of interest is low the demand for the loanable fund for investment will be high that is an inverse relation between demand for loanable funds and investment. Dis-saving is an opposite act of saving; the demand comes from the people at the time when they want to spend beyond their current income. Hoarding is a decreasing function of the interest rate.

Supply of Loanable Funds

Supply of loanable funds is basically derived from four sources such as saving, dis-hoarding, disinvestment, and bank credit

❖ Saving(s): constitute the most important source of the supply of loanable funds. Savings is the

difference between income and expenditure. Individuals, as well as businessmen, will save more at a higher price (rate of interest).

- Dis-hoarding: generally individual dis-hoard money from the past hoardings at a higher interest rate. At higher interest rate idle cash balances of the past become the active balances of the present and become available for investment.
- Dis-investment: Occurs when the existing stock of capital allowed wearing out without being replaced by the new equipment. Dis-investment will be high when the present interest rate provides better returns in comparison to present earnings. Thus a higher rate of interest leads to higher disinvestment.

Social Inclusion Theory

Social inclusion is a complex and multi-dimensional process. It involves the lack and/or denial of resources, rights, goods and services and the inability to participate in the normal relationships and activities, available to the majority of people in a society, whether economic, social, cultural or political arenas. It affects both the quality of life of individuals and equity and cohesion of society as a whole (Levitas et al 2007). This is related to the concept of poverty because those set of individuals who are socially excluded are more vulnerable to poverty because they have been socially and economically excluded (Oppenheim and Harker, 1996).

Financial inclusion perception falls within the broader concept of social inclusion whose aim is to maintain or ensure social inclusively and equally treatment for all. Social inclusion, therefore, promotes positives values of equal opportunities for all while reducing the ever-widening gap between the rich and the poor (Dunstone 2017).

It can be deciphered that financial inclusion brings about the total reform of socio-economic and financial realities surrounding individuals. Therefore social inclusion covers financial inclusion which influences the daily lives of the people in a positive way. Honohan and Hing (2012) opined that access and use of a wide variety of financial product have been shown to promote smoothing of consumption.

The financial exclusion does not only increase poverty, but it also results in a lack of growth and development of the economy. Hence, the desire for financial accessibility or services to be made available and difficulty of individuals in accessing the finance need to be looked into by the government, financial institutions, private investors and communities (Sinclair, 2001**)**.

Empirical Literature Review

Mohammed and Mensah, (2017) studied financial inclusion and poverty reduction in sub- Sahara African using the two-stage method where the first stage was the use of probit to determine the determinant of financial inclusion and the second stage was the use of inverse mills ratio(IMR) to estimate 20% poorest income quintile by the various individual. The research was carried among low-income individuals using 35 sub-Saharan African countries and data was sourced from World Bank micro data on the global financial inclusion, (Global findex, 2011). The findings include that benefit of financial inclusion significantly reduce the level of poverty in SSA. The probit result shows that financial inclusion has a larger welfare benefit for the poor who are financially restricted due to they no longer engaged in economically active in service where they will earn for their up keep.

Park and Mercado, (2015) Examined financial inclusion, poverty and income inequality in developing Asia using OLS. The study concludes that per capita income, demographic characteristics and rule of law significantly affects financial inclusion in Asia.

Sarojit (2015) Examine financial inclusion as a step towards eradicating poverty using Simple OLS seeking to search out the relationship between financial inclusion and poverty, and how financial inclusion helps to improve wellbeing in India. The data set was from a secondary source and the findings show that financial inclusion offers incremental and complementary solutions to tackle poverty which can promote individual welfare and in turn inclusive development. The study finds that since 2005 that is after the launching of financial inclusion in India, the rate of poverty had been declining at 3 fold rate in India.

According to Honohan and king (2012), who carried out a cross-country analysis of the cause and effect of financial access. In this study, a survey on several African Countries was done using a nationally representative sample. Probit and OLS was the analytical tool and the finding depicts that location measured by urban and rural areas were the key factors for financial access. Also, Ugwanyi (2012) examined access to finance and the impact of credit on households welfare in Nigeria using a discrete econometric model such as the probit and Logit models. The findings include that savings (FI) had a positive impact on household welfare and in location household that resides in the urban area had greater plus on accessing credit than rural residents. As insufficient income, inadequate collateral, education level,

occupation and other serves as a blockage to access to finance. Equally, Alexandra *et al.* (2016) studied financial access and household welfare a shred of evidence from Mauritania using discrete econometric model(probit) and micro-level data from a 2014 household to evaluate the relationship between credit access, a range of household characteristics and welfare indicators. The findings envisage that age and education level of the head of household and household's location in an urban area appears to be a significant determinant of credit access.

METHODOLOGY

The paper employed a cross-sectional data which was sourced from a well-structured questionnaire surveyed from Abakaliki area Ebonyi state Nigeria and it is in line with the works of Ugwuanyi, (2012), Sarma and Paris (2011) and Ukoha *et al.* (2007). The methodology of this study comprises of the econometric tool of Logit and Ordinary least square regression. Data processing used was the statistical package of social sciences (SPSS 16) and STATA 13.

The study area is Abakaliki metropolis which is the capital city of Ebonyi state. It has a land mass of about 113.41Km and comprises of an estimated population of 632,000 (NPC, 2022). It is located at the intersection of Enugu, Afikpo and Ogoja roads. The area is made up of both indigenes and non-indigenes of Ebonyi state. This comprises both the employed and non-employed in the locality; students, civil servants, apprentices, public servants, farmers, traders and so on. The population of this study is based on the entire households in Abakaliki area of Ebonyi state. The estimated average of person per household in Abakaliki area of Ebonyi state is five (5) persons (NBS, 2006). Therefore, we divide the total population of the Abakaliki people by the number of average persons per household (198100/5), this will result in a total of 39620 households. This will serve as the population of the study.

For proper determination of sample size, the sample size formula as specified by Yamane (1967) and Cochran (1977), as cited in (Ojide, 2016) will be adopted and it is stated in equation one below;

$$\mathbf{n = \frac{N}{1 + N(e^2)}} \quad \ldots\ldots\ldots\ldots\ldots\ldots$$

Where:

n = sample size

N = the proportion in the target population estimated to have a particular characteristic

E = margin of error

Therefore; given the population of the study area which is estimated to be 39620, the sample size will be computed as follows;

$$n = \frac{39620}{1 + 39620\,(0.07^2)}$$

Thus, n = 203

This figure was used as the sample size for this research work.

In this research paper the probability sampling method is used, which means that every unit in the population has an equal chance or greater than zero chance of being selected in the sample (Lohr, 1999), thus will reduce bias due to sampling error. The instrument that was used for data collection is a well-structured questionnaire which comprises the demographics, socioeconomics, cultural, technological, access to banks as well as financial questions feature for the household, (World bank, 2014). The questionnaire was administered to the respondents and be well explained to avoid wrong interpretation of the question.

To check the validity of the instruments, a well-structured questionnaire was developed. Conversely, the reliability of the instruments used for the research work was verified using the split-half method; this method treats the two halves of a measure as alternate form. Davidshofer and Morphy (2005). It also involves administering a test to a group of individuals. Splitting the test in half and correlating the scores on one half of the test with scores of another half of the test. The correlation between the two split halves is used in estimating the reliability of the test. The Guttman split-half reliability test was used. For this, a pilot study of 30 households was randomly selected in Abakaliki area.

Model Specification

Objective 1:

The model for testing the first hypothesis is specified as follows:

$W = f(X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9)$, W= welfare proxied by Per Capita Expenditure (Pc exp) . Therefore, Pc exp = $X_1 + X_2$ acct-own + X_3mrs + X_4 hhincomeasqu+X_5 gender X_6Ageyrs+ X_7 Edu-level +X_8access bank + X_9hhsize + ui,……………

Objective 2:

The model for testing the second hypothesis is specified as:

FI = f(X_1,X_2,X_3,X_4,X_5) Where FI is proxied with Acct(Acct with other financial institution), Hence Acct= f (X_2 acct-own + X_3mrs + X_4 hhincomeasqu+X_5Edu-level +X_6access to bank *)*

Objective 3:

The model is testing the third hypothesis:

FI = *f* ($X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8,X_9$), FI= financial Inclusion proxied by Account ownership. Therefore,

Account ownership = ($\beta 1+\beta_2$mrs + $\beta_3$hhincomesqu + $\beta_4$gender + β_5AgeYrs + β_6EduIevel + $\beta_7$1ocation + $\beta_8$hhsize + $\beta_9$access_bank + *ui* ……………….

RESULT AND DISCUSSIONS

Data Presentation

Reliability Test

A pilot study was carried out randomly using 30 selected samples in Abakaliki. The results of the reliability tests are presented in Table 1.

Table 1: Reliability Statistics: Financial inclusiveness and Socio-Economic factors

Statistics								
Cronbach Aipha					Correlation Between Forms	Spearman-Brown Cofficient		Guttman Split-Half Coefficient
Part 1		Part 2		Total No. of Items		Equal Lenght	Unequal Lenght	
Value	No. of items	Value	No. of Items					
.646	4[a]	.309	4[b]	8	.556	.714	.714	.711

Source: A

a. *The items are: Availability of Bank in an area, proximity of the bank, Individual ownership of an official bank account, Number of banks available.*
b. *The items are: Gender of the household head, Household monthly total expenditure categorized, Household size, Education level of the household head.*

The responses from the pilot study on the socio-economic and financial inclusion participation section were examined using Guttman Split-half reliability index. The coefficient alpha for socio-economic characteristics is 0.711. On the average, the research instrument achieved 71.1% reliability.

Results of Descriptive Statistics

Table 2 shows the distribution of the respondents as to being the household head. The findings posit that 63.05% of those who responded to the questionnaire are household heads while 36.95% of the respondents are not household head.

Table 2: Respondent by Household Head

Response	Frequency	Percent (%)
No	75	36.95
Yes	128	63.05
Total	203	100.0

Source: Authors Compilation, 2023

Figure 1: Distribution of Respondents by Gender

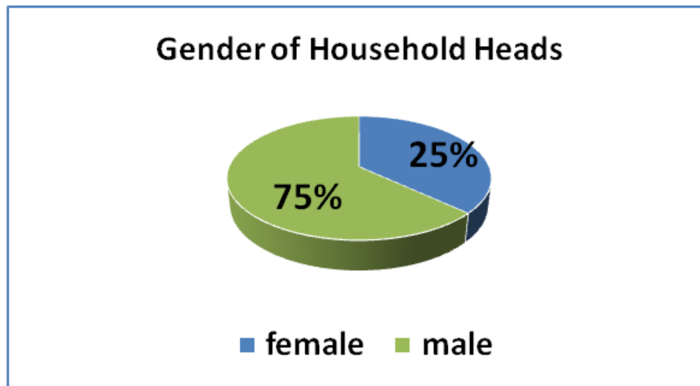


Figure 1 above shows the gender distribution of the household head sourced from the respondent. The findings envisaged that 75% of the household head are male while 25% are female.

Fig. 2: Marital Status of the Household Head

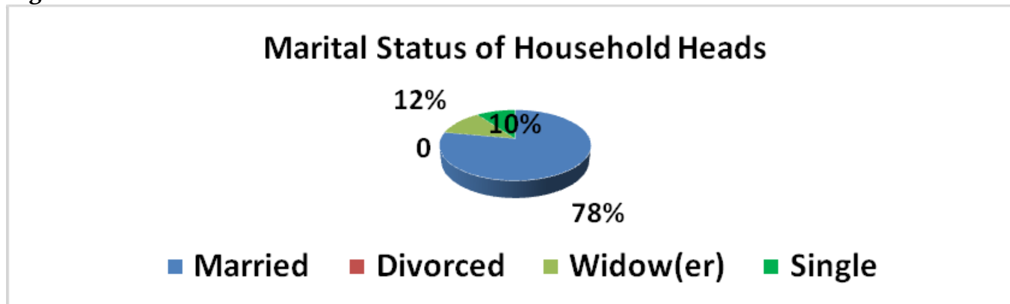


Figure 2 shows the distribution of the household marital status when 78% of the respondents are married, 10% are single, 12% are either a widow or a widower and those that are divorced carried the least percentage at 0%.

Findings on Age of the Respondents

Figure 3 shows the distribution of the household head, where the highest age of the household head from the response of the questionnaire survey range between 46-60years with 33% followed by household head with age rage 36-45 with 29.56%. The household head that are between 18-35 and above 60 years of age are 24.4%and 13.30% of the total examined samples.

Figure 3: Age of the Respondents

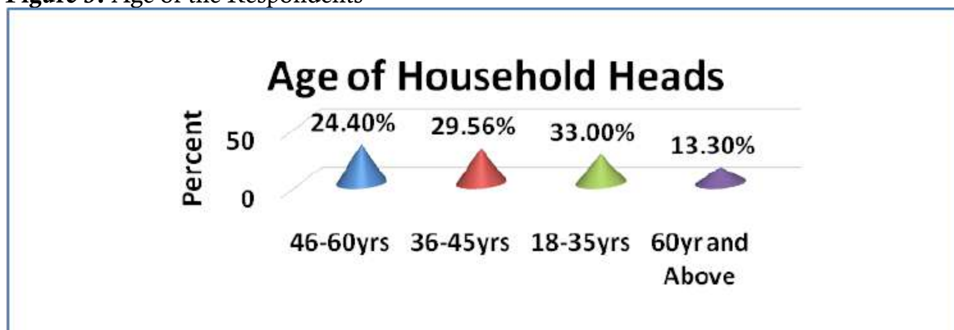


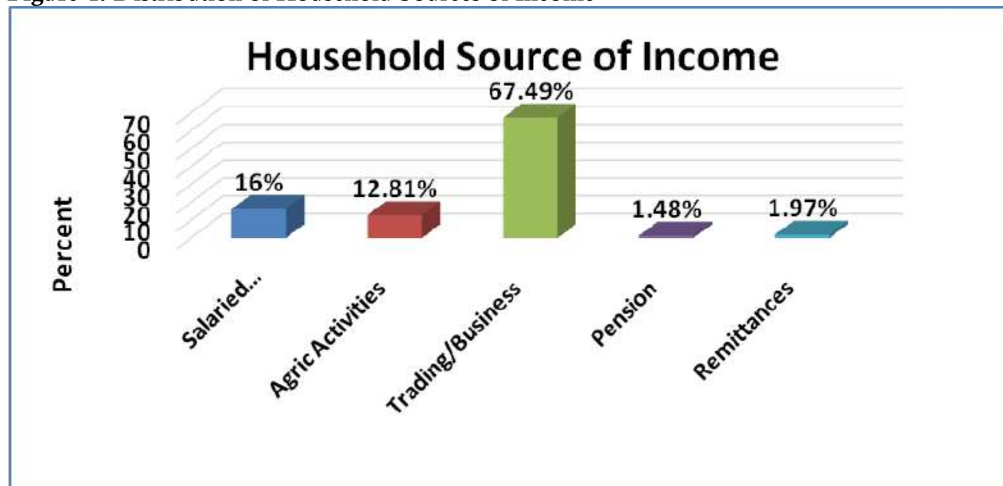
Table 3 shows the distribution of the household head major source of income which posit that 67.49% of household major income is source from Trade/Business in Abakaliki, 16.26% are Salary Employment, 12.81% are into Agricultural activities. Pension and Remittances have the lower percent with 1.48% and 1.97% respectively.

Table 3: Household Source of Income

Income source	Freq.	Percentage	Cumulative %
Salary Employment	33	16.26	16.26
Agricultural Activities	26	12.81	29.06 "
Trading/Business	137	67.49	96.55
Pension	3	1.48	98.03
Remittances	4	1.97	100.00
Total	**203**	**100.00**	

Source: Authors Compilation, 2023

Figure 4: Distribution of Household Sources of Income



Individual Ownership of Bank Account

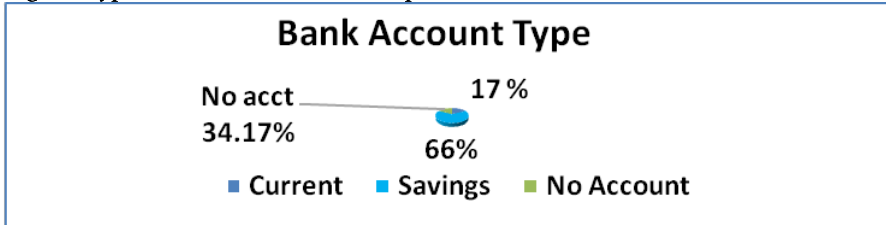
Figure 4 shows the result of the distribution of the Household head ownership of official bank account where 83% have an account in the bank, while 17% of the respondents do not have account in the bank.

Figure **4:**Distribution of Individual Ownership of Bank Account

Finding on the major Type of Account of the Respondents

The result shows that 66% of the household heads have savings account, 34.0% of the household head have current account, While 34% of the respondents do not have any official account in the bank.

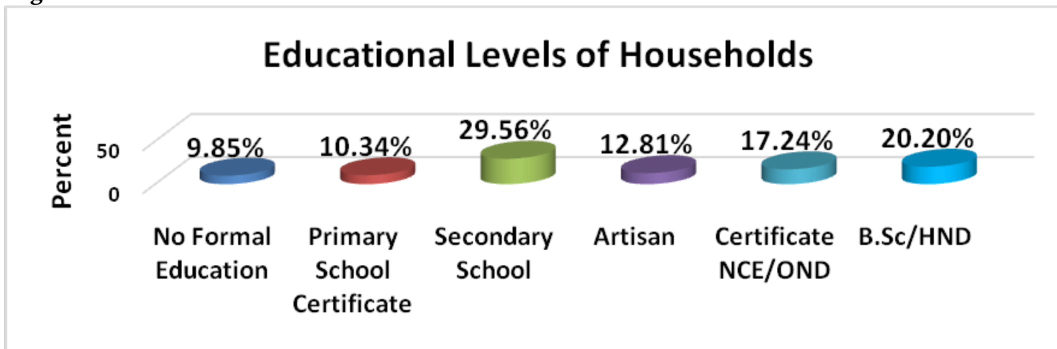
Fig. 5: Type of Bank Accounts of Respondents



Findings on the Education level of the Household Head

Figure 6 shows the distribution of the household head education level. The result shows that 29.56% of the respondents have obtained their SSCE. 20.20% of the respondents have B.Sc/HND. Respondents with NCE/OND are 17.24%. 10.34% of the respondents have obtained FSLC, while 9.85% have no formal education and 12.81% have certificate degree and artisan

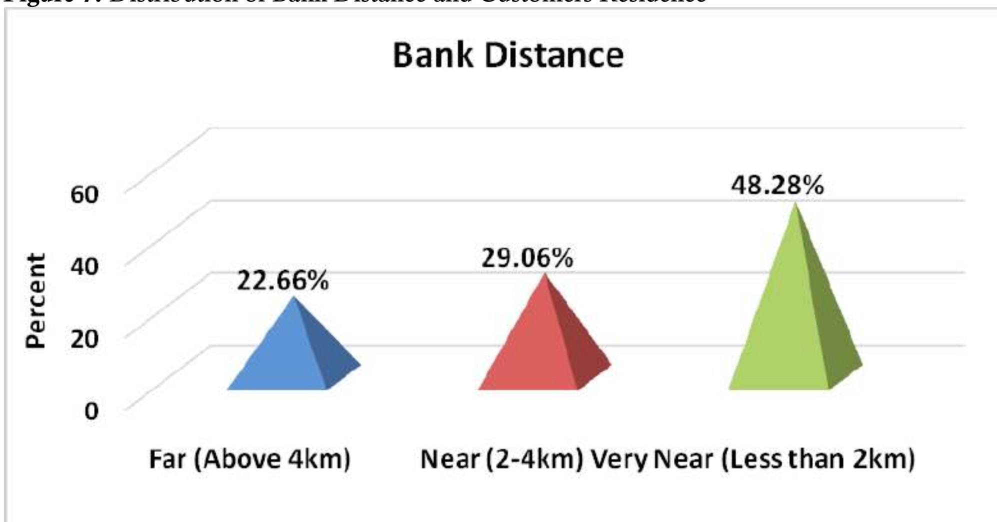
Figure 6



Findings on Proximity of Banks

Figure 7 shows the distribution of the respondents' proximity to banks in Abakaliki, Ebonyi state. Where 22.66% live far from the nearest banks (4km), 29.06% of the respondents reside near from the nearest bank (2km-4Km) and 48.28% of the respondents live very close to the bank.

Figure 7: Distribution of Bank Distance and Customers Residence



Results of Inferential Statistics

Table 4 shows the result of the estimated logit regression model on determinants of financial inclusion in Ebonyi state Abakaliki capital town.

Table 4: Logit Result of Financial Inclusion Determinant Result

Logistic regression Log pseudolikelihood = - 41.946419						Number of obs = 203 Wald chi2(8) = 40.08 Prob > chi2 = 0.0000 Pseudo = 0.5427
acct_own	Odd ratio	Coef.	Robust std. error	t	P>/t/	95% conf. Interval
Hhincomepasquar	1.0002	.0002	.0000489	4.02	0.000	.0001008 .0002925
bankacces1	1.0002	.0002	.0000594	3.06	.002	.0000655 .0002982
Hhsize	1.3961	.3337	1.457779	2.29	.002	.0480248 .6194635
Ageyrs	.9517	-.0496	.027115	-1.83	0.068	-.1026996 .0035893
Location_bank	1.0504	.0492	.3534654	0.14	0.889	-.6435336 .7420254
Mrs	1.4956	.4025	.3273795	1.23	0.219	-.2391446 1.044159
Edulevel	1.5859	.4611	.2247987	2.05	0.040	.0205286 .9017234
Gender	.5282	-6.9478	.6314047	.101	0.312	-1.8757726 .5993347
_cons	.0010	-6.9478	2.55433	-2.72	0.007	-11.95422 1.941143

Source: Authors Compilation from the Logit Analysis

Interpreting the result in Table 4, the log likelihood shows the overall significant of the model. The closer the log likelihood to zero (0), the more significant or fitted the model becomes. The log likelihood of the result above is about - 41.94 which show that the model is significant. The decision rule is that if the P-value is less than 0.05, we reject the null hypothesis (H_0) and conclude that the parameter estimate is statistically significant and vice versa. The Prob (chi^2) = 0.000 shows that the model is statistically significant which conforms with the conclusion that the regression coefficients in the model are not equal to zero.

The logit regression showed that financial inclusion is determined by Access to bank, literacy level, Gender, Age(in years), Household size, Distance (in Kilometer), marital status, household income per adult equivalence.

The table 4 results shows that Age, Distance, marital status and gender are not significant at 5% level of significance. While literacy levels, Household size, are significant at 5% level of significance and household income per adult equivalence and Access to bank are significant at 10% level of significance. The result finding is in line with Mwanyi and Sichei(2012) who studied "Determination of access of credit by individual in Kenya, and conclude that size of household, education, income, marital status of the household head together with distance from service provider were found to be important determinant of access of credit and also Inoue (2019) deciphered that access to finance which depict the ratio of the household to the number of bank accessible in the location of study to be significant determinant of financial access in India.

Household Income per Adult Equivalence

Given the determinant of financial inclusion, if the household income per adult equivalence increase by one, it increases the odds in favour of being financial inclusive significantly by .0002 holding other factors constant.

Access to Bank

Given the determinant of financial inclusion, if the household access to bank increase by one, it increases the odds in favour of being financial inclusive significantly by .0002 holding other factors constant.

Education Level

Given the determinant of financial inclusion, the higher the education level of the household head, the higher the odds in favour of being financial inclusive by .4611 holding other factors constant.

Household Size

Given the determinant of financial inclusion, if the household size increase by a score, it increases the odds in favour of being financial inclusive significantly by .3337 holding other factors constant.

Table 5: Cross-Sectional Regression Analysis of the Impact of Financial Inclusion on Household Welfare in Abakaliki Metropolis of Ebonyi State Capital Town

Regression Linear					Number of obs = 203 F (8, 194) = 155.99 Prob > chi2 = 0.0000 Root Mean = 0.2146
lhhpcexp	Coef.	Robust Std. Err.	t	P>/t/	[95% Conf. Interval]
Lhhincomeasqu	.6974	.0718614	9.70	0.00	.555642 .839102
bankacces1	.0543	.0424771	1.28	0.203	-.0294943 .138058
Lhhsize	-.5053	.0405066	-12.48	0.00	-.5852529 .138058
Lageyrs	.1339	.0764874	1.75	0.82	-.0169708 -.4254732
acc_own	.0073	.0523558	0.14	0.890	-.0959894 .11053
Mrs	.0002	.0227201	0.01	0.991	-.0445603 .04506
Edulevel	.0294	.0140027	2.10	0.37	.0017639 .2040066
Gender	.1108	.0472512	2.35	0.20	.0176227 .2040066
_cons	1.3582	.677878	2.00	0.047	.021160 2.695074

Source: Authors Compilation from the Logit Analysis
Mean VIFI 1.58

The number of observations satisfied the thumbs rule of large sample (n>30), the pro>F = 0.000 depicts that the entire model is statistically significant and the coefficient of the entire variable is not equal to zero (O). The R^2 = 0.8398 decipher that the independent variable explains or predicts 84% of the dependent variable, the Robust standard error posit that the model is free of econometrics problem of Heteroscedasticity. Further the mean VIF (1.58) is below 5 which mean that there is no multicollinearity in the independent variables. The continuous variables are in log form to reduce the length of the estimated coefficient of the parameters.

The cross-sectional regression displayed that household welfare depends on Access to bank, literacy level, Gender, Age (in years), Household size, marital status, household income per adult equivalence and official ownership of bank account.

The table 5 result decrypt that Age, Distance, marital status, access to bank and official ownership of bank account are not significant at 5% level of significance. While literacy levels, gender, are significant at 5% level of significance and household income per adult equivalence and household size are significant at 10% level of significance. The result finding is in line with Ousmane *et al.* (2017) who studied Effect of financial inclusion on household consumption in Nigeria and conclude that size of household negatively affect household welfare and household headed by women is prone to have a lower consumption per income than otherwise. Ukoja *et al.* (2007) concurred that income, physical assets, level of education and ages of household heads have a significant positive effect on welfare. On part of financial inclusion which positively related to welfare in line with the work of Ugwuanyi (2012) but is significant, this may be due to poor knowledge of the effectiveness of the current paradigm (FI) in the state.

Household Income Per Adult Equivalence

A relative increase in household income per adult equivalence by one significantly increases household welfare by .6974 holding other factors constant.

Education Level

The higher the education level of the household head, the significantly raise of household welfare by .0140 holding other factors constant.

Household Size

A relative increase in the household size by one, significantly decreases household welfare by .04050 holding other factors constant.

Gender

The male household head per capita expenditure is significantly higher than the otherwise by .0472512 holding other factors constant.

Discussion of Findings

Determinants of Financial Inclusion

Table 6: The Logit result decipher that Age, Distance, marital status and gender are not significant determinant of financial inclusion of Household dwellers in Abakaliki, Ebonyi state. While literacy levels, Household size, are significant at 5% level of significance and household income per adult equivalence and Access to bank are significant at *1%* level of significance. The result finding is in line with Mwanyi and

Sichei(2012) who studied "Determination of access of credit by individual in Kenya, and conclude that size of household, education, income, marital status of the household head together with distance from service provider were found to be important determinant of access of credit and also Inoue (2019) deciphered that access to finance which depicts the ratio of the household to the number of bank accessible in the location of study to be significant determinant of financial access in India.

Financial Inclusion and Household Welfare

The table 7 result decrypt that Age, marital status, access to bank and official ownership of bank account did not significantly impact on household welfare in Abakaliki, Ebonyi state. While literacy levels, gender, are significant at 5% level of significance and household income per adult equivalence and household size are significant at 10% level of significance. The result finding is in line with Ousmane, Ismaeel and Aliyu (2017) who studied Effect of financial inclusion on household consumption in Nigeria and concludes that the size of household negatively affect household welfare and household headed by women is prone to have a lower consumption per income than otherwise. Ukoja, Mejeha and Nte (2007) conclude that income, physical assets and level of education has a significant positive effect on welfare. On part of financial inclusion which positively related to welfare is in line with the work of Ugwuanyi (2012) but is insignificant, which may be due to poor knowledge of the effectiveness of the current paradigm (FI) in the state?

CONCLUSION AND RECOMMENDATIONS

The aim of this research paper is to examine the relationship between financial inclusion and household welfare. But the exact objective is to know the impact of financial inclusion on household welfare in Abakaliki Ebonyi state. After the analyses, it was discovered that financial inclusion has no significant impact on household welfare improvement in Abakaliki metropolis of Ebonyi state. Therefore, the study recommends and employs Policies that will encourage education.

As it is in the empirical result, it can be seen that education level (qualification) is a determinant of financial inclusion and also relevant for welfare improvement. The good news should speculate to other parts of the state and country at large in order to improve the wellbeing of the household in Ebonyi state and alleviate the state from poverty knowing that according to a report by the National Bureau of statistics (2017), Ebonyi State remains the only south-east state in the first ten poor states in Nigeria with over 70.6 % of their dwellers considered to be poor which kept the state on the seventh position from the top in the state poverty rank table. So, it is recommended that government should make policies that support education growth as shown by Mwanyi and Sichei (2012) that education attainment is a significant determinant of access to formal credit and Ukoja *et al.* (2012) On the other hand level of education have a significant positive effect on welfare. Therefore, Policies that reduce the difficulty associated with financial access of fund for doing business should be employed. Also, Policies that reduce the difficulty associated with financial access of fund for doing business should be employed

It was observed that financial inclusion does not impact on household welfare in Abakaliki. This might be because of the rigorous process attached with being financially inclusive. On the other hand income per adult equivalent was significant and positive and, Ousmane *et al.* (2017) posit that Since the poor spend most of their income on personal consumption, access to finance could assist in enhancing the household small enterprise, support the education of their children and pay for their medical need thereby improving household welfare and reducing the chance of being pushed into poverty. .Therefore, policies that reduce the difficulty associated with getting financial grants and facility for improving economic activities (business) that enhance household income should be employed and also the Ebonyi state government (Nigeria at large) should create financial grant through finance intermediaries like Nigerian Bank for Commerce and Industries knowing that majority of the household mostly source their income from trading and commercial activities.

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NEXUS BETWEEN ENVIRONMENTAL POLLUTION AND COST OF MANAGING INFORMAL SECTOR ACTIVITIES: A SURVEY OF IKWO LOCAL GOVERNMENT AREA, EBONYI STATE

[1]Onuba, Chinwe O.,[1]Uwazie, Iyke U.&[2]Chukwu, Ugochi E.
1Michael Okpara University of Agriculture, Umudike Umuahia &
2Alex Ekwueme Federal University Ndufu-Alike, Ebonyi State
Corresponding author: chionuba@yahoo.com

ABSTRACT
In developing countries, the informal sector plays a diverse role, from providing employment to polluting the environment. Perhaps, due to inadequate awareness of this sector and improper policy implementation, the aspect remained ignored. This study was an attempt to determine the nexus between environmental pollution and the cost of managing informal sector activities, in Ikwo local government area Ebonyi state.To this end, the binary logistic regression was employed to discover if the activities of household in informal sector contributes to environmental pollution and the extent to which the government have gone in curbing these excesses. The outcomes unveiled that households involved in the informal sector contributes to environmental pollution, proving so with a 0.000 probability level of significance, and that the government have not effectively curbed the excesses, proving so with a 0.51 probability level of significance. In other words, we can say that, households engaged in the informal sector are statistically significant, while government awareness of businesses is not statistically significant. It is therefore recommended that government gets the informal sector workers registered, and impose effective government bodies and environmental laws, to be adhered by the informal sector. Also, effective environmental laws should be imposed on households who pollute the environment.
Keywords: Informal Sector, Environmental Pollution, Employment Provision, Nexus

INTRODUCTION
Climate change and global warming are two of the most significant problems that humanity is now experiencing. The International Panel on Climate Change submitted a study on the effects of an increase in global air temperature of 1.5°C above the average air temperature at the pre-industrial level on October 6, 2018. Carbon dioxide emissions from human activity that have accumulated are one of the possible reasons for this condition (Khan *et al*., 2020), this is evident as humans utilize the earth's abundant natural resources to suit their requirements, then transform them into completed items and discard the leftovers into the environment as solid trash, liquid waste, and even carbon dioxide emissions into the atmosphere. Most nations have made considerable environmental protection efforts, and developed nations have had great success in effectively combating pollution. However, the continuation of an informal sector presents a significant challenge for developing nations in enforcing environmental norms. According to the research of (Sultana et al., 2022), the majority of employment in developing nations is found in the unorganized sector. The existence and development of an individual, organism, group, or society can be affected by a wide range of external situations, conditions, and things, according to recorded evidence (Isaichei, 1999). It is worth noting that, the industrial and service sectors also contain a sizable portion of the informal sector.

The informal sector in some sub-Saharan African nations, such as Tanzania and Zambia, creates 90% of all employment opportunities and can account for up to 38% of the region's Gross Domestic Product (GDP) (Hilson & Maconachie, 2020). Waste disposal has become one of the most glaring environmental challenges in rural areas of Africa and so, the government struggles to keep up with the fast-expanding municipal garbage emanating from operations in the unofficial sector. For instance, in Nigeria, environmental issues were not given official prominence until the Koko toxic waste dumping scandal, which also highlighted the urgent need to establish the Federal Ministry of Environment, the Federal Environmental Protection Agency (FEPA), and other relevant organizations, ostensibly to address environmental-related issues in the nation (Emmanuel et al., 2021). According to a report, 80.4% of jobs in Nigeria were in the informal sector, compared to 10% in the formal sector and 9.6% in households, a total of 78.8 percent of men 82.1 percent were in the informal sector; 12.9 percent of men and 6.9 percent, were in the formal sector and 8.3 percent and 11 percent in households (Adiele, 2019).The informal sector has emerged as the leading contributor to the Gross Domestic Product (GDP) and a platform for innovation and entrepreneurship (Igwe *et al.,* 2020).

Environmental pollution is one of the most serious challenges faced in Nigeria. Wild-type organisms have a slower degradation rate of hazardous materials – described as unwarranted disposal of mass or energy into earth's natural resource pool such as water, land, or air that results in long- or short-term detriment to the atmosphere and its ecological health to negatively impact the living beings and their life both quantitatively and qualitatively (Rafeeq et al., 2023). The word informality also known as black economy or underground economy is a home word as it dates back to the analyses of the British anthropologist Keith Hart, who coined the term "informal sector" in 1971 publishing it 2 years later in the article (Rosaldo, 2021). Hiring and Moe defined it similarly as a sector that produces legal goods but does not comply with the regulations of the government.

The scale of the informal sector is very colossal: more than half the global workforce toils in the informal economy. In rural areas like Ikwo, the informal sector economy sustains the livelihood of impoverished populations through natural and land-based economic activities which consist of mining, farming, logging, etc. In developing countries such as Nigeria, factors such as population growth, rural-urban migration, and government efforts to regulate tax have spurred the rapid expansion of the informal sector that is comprised of low-technology micro-enterprises which operate outside the purview of the state (Owuor, 2022).

The cost of managing the informal sector is mostly borne by society, and less by the government therefore, the distinguishing characteristics of the informal sector have made the cost of managing almost tasking. Activities within it cannot be directly observed, and for the most part, participants in the informal economy do not want to be accounted for. Just like Alvarado, argued, the presence of a large informal sector in developing countries (just like Nigeria), indicates a serious challenge for the implementation of environmental regulations in these countries and may pose serious environmental consequences which may affect soil, air water, and, land (Alvarado *et al.,* 2022). To this end, it is crucial to take to a full understanding of the links between informality and environmental performance.

In the context of the environment, informal economic activities are frequently associated with pollution of the land, water, air, and sound on the one hand, and are praised as environmental cleaners due to their inability to re-use materials generated by the formal sector on the other (Kara, 2022).Therefore, the informal sector affects a large sphere of the environment- this is due to lack of tax imposition, lack of regulatory procedure, and improper waste management among others(Saha *et al*., 2021).

The unearned cost advantage informal businesses enjoy from ignoring taxes allows them to undercut the prices of more productive competitors and stay in business, despite very low productivity (Meagher, 2020). A rural area like Ikwo that proves to shy away from tax imposition has earned more than the tax-affected areas and has exercised the ability to cause environmental toxicity. Governments frequently aren't aware of the significant health and economic benefits associated with reducing informality, as well as what they can and must do to address its root causes, including high taxes, intricate tax systems, onerous regulations, tax enforcement, and social norms that view noncompliance as acceptable. Reducing informality requires addressing these issues.

Simplifying regulatory processes is another important factor in limiting the size of the informal economy. It can be difficult to register a new firm, however, it is extremely difficult to collect taxes from unregistered enterprises and enforce restrictions when they do so. Additionally, tax codes are frequently unnecessarily complex (Meagher, 2020).Spain raised the amount of taxes it received from small and medium-sized enterprises by 75% after allowing small businesses to calculate taxes based on tangible factors, such as a store's square footage, rather than reported revenue, which is difficult to verify.

Another factor is improper waste management- considering this, Nigeria has been ranked the ninth-highest country producing unmanaged plastics in the world, accounting for 2.7 percent of global mismanaged plastic waste, according to the World Bank (Barnardo, 2020). Much of the solid waste generated across Nigeria litter the environment, and block drainage, causing flooding and air pollution. The United Nations has projected that Nigeria's 200 million population will double by 2050, which could get worse for the country if the issue is not properly addressed (Yaya et al., 2021).The 'polluters pay' principle is the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment. Kenya, Rwanda, Netherlands, and 32 other countries have adopted nationwide taxes or bans on plastics but Nigeria is yet to make a move on this. Despite the huge challenges, there are opportunities in waste management but this cannot be harnessed without strict sanctions on reckless waste disposal in Nigeria.

In Nigeria, many rural areas such as Ikwo local government area in Ebonyi state have most of its population involved in the informal sector, and this has increased the level of environmental hazards. A large part of the informal sector is concentrated in resource extraction, manufacturing, servicing, and

retailing activities such as farming, construction activities, cassava processing, fish farming, bush burning in the planting process, hawking, etc, of which have contributed considerable negative environmental impacts. Improper sewage disposal also pollutes the environment. Diseases caused by air, water, and soil pollution were responsible for 9 million premature deaths, which covers over 16% of all global death (recorded in 2015) (Fuller *et al.*, 2022). Therefore, the study will provide answers to the following questions: How have the activities of households in the informal sector affected the environment? and what extent have government effectively curbed pollution caused by the informal sector?

LITERATURE REVIEW

Concept of sector

Sector is an area of the economy in which businesses share the same or related business activity, product, or service. Sectors represent a large grouping of companies with similar business activities, such as the extraction of natural resources and agriculture. Dividing an economy into different sectors helps economists analyze the economic activity within those sectors. As a result, sector analysis indicates whether an economy is expanding or if areas of an economy are experiencing contraction.

An Informal sector, otherwise known as the grey economy or informal economy, is that part of any economy that is neither monitored nor taxed by any form of government. According to (Quiros-Romero *et al.*, 2021), the informal sector is broadly defined as an economic activity that is not subject to government regulation, taxation, or observation. According to (Ndawana, 2022), the informal sector has become a 'contemporary governance dilemma' in international development. Traditionally, informality is associated with undesirable development outcomes such as tax evasion, unregulated enterprises, environmental degradation, and illegal activities (Tang, 2020). The informal sector however makes up a notable portion of the economies in the developing countries; it is sometimes stigmatized as troublesome and unimaginable.Other concepts related to the informal sector are black economy, underground economy, shadow economy, algorism, and system D. Other synonyms related to the term are; "off the book" and "working for cash".

Concept of Environment

Aina (1991) explained that the term implies all physical and biological systems in which humans and all other organisms live-this was used in the FEPA formulation of policy in Nigeria. Another view on the environment was given by Baba (992) who sees it as the components and systems of the geosphere as is applicable in the natural sciences, or the reservoir of resources on which man draws to sustain their livelihood.

Concept of Pollution

Pollution can be seen as the introduction of contaminants into the environment that causes adverse change. Pollution can be in any form of substance (solid, gas, or liquid). The components of pollution otherwise known as pollutants, can be either foreign substances/energies or naturally occurring contaminations. Although the word pollution generally implies that the contaminants have an anthropogenic source – that is, a source created by human activities, it can also be caused by natural events. Causes of pollution can be classed into point source or nonpoint source pollution.

Theoretical Literature Review

Neoclassical approach to the theory of the informal economy

Under the neoclassical approach to the IE, the microeconomic models are included in which the rational agent chooses to operate informally as a result of a constrained maximization of his/her value function and, in macroeconomic models, the equilibrium is obtained by assuming a competitive market. (Dell'Anno, 2022). If the focus is on the "informal sector," where informality is mainly related to employment, then the usual analytical framework consists of macroeconomic two-sector search and matching models (Dell'Anno, R. 2022).He develops a model where a firm's decision to hire informal workers depends on the desire to remain small to enjoy legal exemption from a mandated minimum wage policy. (Ihrig and Moe 2004) analyze the agent's decision to accumulate capital and to work in the formal and informal sectors using a two-sector dynamic equilibrium model. In terms of policy implications, the authors conclude that to reduce the informal sector the most effective policies are to cut tax rates and increase enforcement by implementing higher tax penalties for informal agents, rather than increasing the chances that an informal agent may be caught.

Macro-econometric approach to the informal economy

One of the reasons for this success is the relatively recent abundance of estimates of the size of informal GDP. These estimates have encouraged researchers to empirically explore both the most significant causes of informality and also the effects that IE has on other variables.

Taking into account that an exhaustive list of these studies is outside the scope of the present survey, Dell'Anno (2021) groups potential drivers of the IE into six categories. These categories deal with taxation system (e.g., measured as overall tax burden, tax mix, tax complexity, marginal tax rate); regulatory system (e.g., overall regulatory burden, employment protection legislation) labor force composition (e.g., self-employment rate, unemployment rate, the existence of a significant amount of illegal immigrants, unskilled workers); enforcement system (e.g., probability of detection, fine rates, the strength of criminal penalties); tax morale and institutions (e.g., historical roots, fairness of public policy, corruption, quality of political institutions, media, and economic freedom). An important issue for these empirical analyses is to determine the direction of causality between IE and the macro-variables.

METHODOLOGY

This research seeks to explore the relationship between the cost of managing the informal sector activities and environmental pollution, using Ikwo, a town in Ebonyi state as a case study. The study adopts its population based on cross-sectional data which will be sourced from a well-structured questionnaire surveyed from Ikwo, Ebonyi state Nigeria.

Data processing will be done using the Statistical Package of Social Sciences (IBM SPSS 20). this research work will use an econometrics tool model known as qualitative response model due to the binary form of it dependent variable, the variance inflation factor would be used to test for Multicollinearity, while a robust standard error will be used to correct any form of Heteroscedasticity. To further comprehend and interpret the results, binary logistic regression will be employed. When conducting the survey, the researcher has to predict a model that would identify the anticipated relationship between the variable to be studied. These surveys are conducted to test the proposed model against observations of the phenomena. A survey is a tool for collecting data for survey research. It is a means through which data about the characteristics, actions, or opinions of a large group of individuals is collected. In this case, the concept survey instrument is frequently used to differentiate the survey tool from the survey research (Pinsonneault & Kraemer, 1993).

The town of Ikwo, in Ebonyi state, is the focus of this study. Ebonyi state is one of the 36 states in Nigeria comprising 13 local government areas which include; Afikpo north and south, Ebonyi, Ezza north and south, Ikwo, Ishielu, Ivo, Izzi, Ohaozara, Ohaukwu, and Onicha. But this study focuses on Ikwo Local Government Area. Ikwo is the largest in Ebonyi state. It is situated in the eastern part of the state. The city and local government area has a land mass of approximately 500km^2 and shares a border with Abakaliki, Izzi, and Ezza local government as well as cross river state. Ikwo has a land mass of about 500km^2 density of 463.5km^2, an area of 690.9km^2, with an estimated population of 320,200 (NPC 2022).

Ikwo is made up of both indigenes and non-indigenes of Ebonyi state. These include both the employed and non-employed in the locality, formal and corporate workers, self-employed, students, civil servants, artisans, public servants, health workers, farmers, traders, and so on. Ikwo is also made up of 14 districts namely; Echie-Like, Noyo-Alike, Inyimagu, Enyibichiri-Alike, Amain-Yima, Ndufu-Alike, Etim-Ekpuitumo, Ndufu-Amagu, Ndiagu-Amagu, Igbudu, Akpan-Wudele, Ndiagu-Achara, Eka-Awoke, Ndufu-Achara.

Ikwo being one of the local government areas in Ebonyi state, have 14 districts, with an estimated population of 320,200 (NPC 2022). To obtain the average number of possible informal sector participants in each district in Ikwo LGA, we divide 320,200 by 14 which equals 22871. This sample size was statistically estimated and generated using 93% degree of accuracy.

The determination of sample size as specified by (Yamane 1967) and (Cochran 1977), also as cited in (Ojide, 2016) will be adopted and it is stated in the equation below:

$$S = \frac{N}{[1+N(e^2)]} \text{ -- (1)}$$

Where:

S = Sample size

N = Population of the informal sector

e = Level of Significance (7% in this case, indicating 93% level of confidence)

Hence N from the population of the study given above is 22,871 persons (respondents) and the level of significance 'e' is 0.07 (7%), then the sample size 'S' for this study is determined thus:

$$S = \frac{22{,}871}{[1+22{,}871(0.07^2)]} = 202 \text{ ----------------------------------- (2)}$$

Equation 2 above clearly indicates that the sample size for this study at a 93% level of confidence is 202 respondents

A sampling probability method is used in this research. usually, a unit in a population has an equal chance or greater than zero (0) chance of being chosen in the sample (Lohr, 1999) this helps to reduce bias due to sampling error that sometimes occurs. Instruments are used for data collection, in this research, a well-structured questionnaire, which entails the socio-demographic determinants of the informal sector.
The questionnaire was administered to the respondents and was also explained as well as guidelines to avoid wrong interpretation of the question, thereafter the questionnaire will be retrieved from the respondent immediately after the questioning exercise.
The internal consistency of the instrument was determined using Cronbach's Alpha Reliability test. The Cronbach's Alpha Co-efficient of the Reliability test is given as:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\Sigma\sigma^2}{\sigma_x^2}\right) \dots\dots\dots\dots\dots\dots\dots\dots (3)$$

Where:
α = Cronbach's Alpha Co-efficient of Reliability
k = No of questions in the questionnaire
σ_x^2 = The variance of the observed total test scores
$\Sigma\sigma^2$ = The sum of the variance of the component, i for the pilot sample of the sole rice farmers
A pilot study was conducted and in Cronbach's Alpha Co-efficient Reliability test, a test is significant if its value is 0.5 and above and insignificant when the value is less than 0.5. Hence values obtained which is 0.5 and above are indicative that the instrument is deemed reliable and vice versa.
A well-structured questionnaire is used in this study for data collection. A descriptive statistical tool would be used to analyze the socio-demographic characteristics of the informal sector their impact on the environment; this is done using SPSS (statistical package for social sciences). The econometric method of the binary logit model will be used to analyze the data obtained. The model is chosen due to its ease of interpretation and usefulness.

Model Specification

A Logit model is a quantitative response model(used due to the binary form of the dependent variable). the binary number which makes the non-linear model more appropriate because the binary outcome is used to generate a non-linear view, which is measured by a dummy in the model which was assigned a value of 1 for respondents showing the severity of the adverse pollution impact and value of 0 for respondents showing the non-severity of the adverse pollution effect. Following the work of (Pikkarainen *et al.,* 2004), a dummy regression model was selected to identify the significant variables (any relationship) that determines the effect the activities of household in the informal sector on the environment in Ikwo and the cost of managing it. Also, a descriptive and analytical statistical method was applied by Ogbodo and Mieseigha (2013) such as simple mean and percentage will be used to summarize the data collected.
The Logit model is adopted from Gujarati, (2013) and is specified thus:

$$Pi = \frac{1}{1+e^{-Zi}} = \frac{e^z}{1+e^z} \text{-- } 4$$

Where $z_i = \beta_1 + \beta_2 X_i + \beta_3 X_j$

Equation 4 represents the cumulative logistic distribution function. We can verify that as p_i ranges between 0 and 1, z_i ranges from $-\infty$ to $+\infty$, and p_i is linear in parameters but nonlinear when it relates to z_i in the model. If p_i, the probability that there is an adverse effect of pollution is 1, and for responses that prove that there is no adverse effect of pollution is $(1 - p_i)$, therefore, the probability of the willingness is given as

$$1 - Pi = \frac{1}{e^z+1} \text{---------------------------------- } 5$$

We can therefore expand the equation as:

$$\frac{Pi}{1-Pi} = \frac{e^z}{e^z+1} * \frac{e^z+1}{1} = e^{zi} \text{-- } 6$$

$\frac{Pi}{1-Pi}$ is odd in favor of adverse effects (Adv eff). Taking the natural log of equation 4, we have the equation as follows:

$$l_i = Ln\left(\frac{Pi}{1-Pi}\right) = z_i \text{ -- } 7$$

zi remains the definition as stated above. the function of n- explanatory variables for the study, the logit model will be run and analyzed using two regressions namely; for Adv eff and pen eff.

$$Li\ (Adverse\ effect) = ln\frac{Pi}{1-Pi} = \beta_1 + \beta_2 Xi + \beta_3 Xj + \mu i \text{------------------ } (8)$$

$$Li\ (Penalty\ effectiveness) = ln\frac{Pi}{1-Pi} = \beta_1 + \beta_2 Xi + \beta_3 Xj + \mu i \text{ ---------- } (9)$$

The models will be explicitly stated as:

$$Adverse\ effect = \beta_0 + \beta_1 Gender + \beta_2 Age + \beta_3 HHSize + \beta_4 Occupation + \beta_5 EDU + \beta_6 HHeffect + \beta_7 Fallenill + \beta_8 Bizpoll + \beta_9 Pollpayment\ \mu_i$$

-------------- (10)

For the above parameters, β_0 is the intercept; β_1 = Gender; β_2 = Age
β_3 = Household size of the informal sector; β_4 = Occupation; β_5 = Education qualification
β_6 = Household effect; β_7 = Fallen ill; β_8 = Business pollution; β_9 = Pollution payment
μi = Error term

$$Penalty\ effectiveness = \beta_0 + \beta_1 Govtawareness + \beta_2 Bodiesinvolved + \mu_i \text{-------} (11)$$

For the above parameters, where β_0 is the intercept; β_1 = Government Awareness
β_2 = Bodies involved; and μi = Error term

a priori expectation

Table 1: the priori expectation for the model specified in the equation

Variables	Expected signs of Adverse effects of pollution	Variables	Expected signs of Pollution penalty effect
Gender	-	Govt. awareness	+
Age	-	Bodies involved	+
HHSize	+		
Occupation	+		
BizNature	+		
EDU	-		
HHEffect	-		
Pollpayment	-		
Fallenill	+		

Model Justification

The Logit regression model is the best and most accurate when the response or dependent variable is qualitative. This will aid to determine the influence of the independent variable on the probability of the severity of the pollution. The logit regression model will help in formulating a sustainable and reliable policy from the results obtained.

Definition of the Variables in the Model

Adverse Effect: This is the dependent variable of the first objective, which shows the environmental pollution in society.
Penalty Effect: This is the dependent variable for the second objective, explaining the effectiveness of pollution penalties on those engaged in informal sector activities.
Gender: This explains the sex of the respondent who is the informal worker.
Age: This tends to explain the age level/bracket of people that engage in the informal sector.
Household Size: This shows the number of dependents in the household.
Occupation: This variable depicts the highest level of education the people in the informal sector attained.
Business Nature: This variable tends to explain the variations in business chains or nature the informal sector engage in.
Education: This reveals the highest educational qualification of the informal worker.
Household Effect: This shows the level to which the pollution in the environment affects the people living nearby.
Fallen Ill: This explains if the environmental pollution has caused people around (both those engaged in the informal and household) to fall ill.
Pollution Payment: This variable reveals if those engaged in the informal sector are fined for the pollution caused by them.
Government Awareness: This variable was used in the second objective to check if the government is aware of those engaged in the informal sector.

Bodies Involved: This variable was also employed to determine what government bodies are involved in regulating the activities of the informal sector.

RESULTS AND DISCUSSION

Reliability test

A pilot study was carried out on randomly selected informal sector owners in Ikwo LGA and the result is as presented in Table 1.

Table 1: Reliability Statistics

Cronbach's Alpha	Part 1	Value	.-164[a]
		N of Items	7[b]
	Part 2	Value	.228
		N of Items	6[c]
	Total N of Items		13
Correlation Between Forms			.048
Spearman-Brown Coefficient	Equal Length		.091
	Unequal Length		.092
Guttman Split-Half Coefficient			0.89

a.The items are: What is your gender, Major source of household income, and Highest education qualification of the household head, how would you rate the adverse effects of pollution in your locality, how does pollution caused by your business affect your environment, How has the level of pollution been in the past few months, what is the current level of pollution after government intervention.

b. The items are: What is the current level of pollution after government intervention, how effective are the penalties for curbing environmental pollution, Are there government bodies responsible for pollution in your area of business, Is the local government aware of your business activities, are their penalties for lawbreakers, If yes, how would you define pollution, What are the impacts of business activities to pollution. The responses from the pilot study on the social demographic factors were examined using the GuttmanSplit-half reliability index. The coefficient alpha for socio-demographic determinants is 0.89, depicting 89% reliability.

Results of Descriptive Statistics

Presentation of Results and Discussion of Findings

Objective 1

Table 1: Binary Logistic Regression Analysis to Determine the Effect of Informal Sector Activities on the Environment

Number of obs=					103	
Hosmer and Lemeshow test					0.903	
Omnibus Sig = 0.015			Nagelkerke R^2= 0.237			
Adveff	Coef.	Std. Err.	Wald	Prob.	[95% Conf.Interval]	
					Lower	Upper
Gender	.194	.373	0.271	.603	.589	2.520
Age	.194	.281	0.475	.491	.655	2.107
HHSize	3.394	.812	17.481	.000	6.069	146.299
Occupation	-.075	.394	0.036	.850	.429	2.007
EDU	-.328	.194	2.870	.190	.492	1.053
HHEffect	-.001	.160	0.000	.995	.731	1.366
Fallenill	.195	.404	0.231	.630	.550	2.684
Bizpoll	-.283	.231	1.500	.221	.480	1.185
Pollpayment	-.158	.387	0.168	.682	.400	1.821

Interpreting the result in the table above, the omnibus and Homer and Lemeshow test shows overall significant of the model. Nagelkerke R^2 shows the goodness of fit of the model, the closer Nagelkerke R^2 is

to one (1), the fit the model is. The Nagelkerke R^2 above is about -0.237, which show that the model is a good fit.
If the Omnibus test is less than 0.05 percent level of significance, it means the model is significant, and if the Hosmer and Lemeshow test is greater than 0.05 percent level of significance, it means the model is significant. From the table, omnibus test (0.015) is less than 0.05, and the Hosmer &Lemeshow test (0.903) is greater than 0.05, which proves the model to be significant.
The decision rule is that if the p-value is less than 0.05, we reject null hypothesis and conclude that the parameter estimate is statistically significant and vice versa.
The Logit regression show that the activities of household activities in informal sector is dependent on gender, age bracket, household size, occupation, educational qualification, household effect, fallen ill, business pollution and pollution payment. A unit increase in household size, age, gender and fallen ill will increase the adverse effect of pollution positively.

Findings

- Gender has a positive effect on the adverse effect of pollution, but not statistically significant because its probability value of 0.603 is greater than 0.05 at 5% level of significance.
- Age has a positive effect on the adverse effect of pollution, but it is not statistically significant because its probability value of 0.491 is greater than 0.05 at 5% level of significance.
- Household size has a positive effect on the adverse effect of pollution, and it is statistically significant because its probability value of 0.000 is less than 0.05 at 5% level of significance.
- Occupation has a negative effect on the adverse effect of pollution, and it is not statistical significant because its probability value of 0.850 is greater than 0.05 at 5% level of significance.
- Education has a negative effect on the adverse effect of pollution, and it is not statistically significant because its probability value of 0.190 is greater than 0.05 at 5% level of significance.
- Household effect has a negative impact on the adverse effect of pollution, and it is not statistically significance because its probability value of 0.123 is greater than 0.05 at 5% level of significance.
- Fallen ill has a positive influence on the adverse effect of pollution, but it is not statistically significance because its probability value of 0.231 is greater than 0.05 at 5% level of significance.
- Business pollution has a negative impact on the adverse effect of pollution, and it is not statistically significance because its probability value of 0.221 is greater than 0.05 at 5% level of significance.
- Pollution payment has a negative impact on the adverse effect of pollution, and it is not statistically significance because its probability value of 0.682 is greater than 0.05 at 5% level of significance.

Table 2: Binary Logistic Regression Analysis to ascertain the extent to which government bodies have effectively curbed pollution caused by the informal sector

Number of obs=						200
Hosmer and Lemeshow test						0.537
Omnibus Sig =0.000			Nagelkerke R^2= 0.223			
Peneff	Coef.	Std. Err.	Wald	Prob.	[95% Conf.Interval]	
					lower	upper
Govtawa	1.196	1.820	0.432	.511	.093	117.204
Bodres	3.786	1.794	4.456	.035	.726	1483.158

Interpreting the result in the table above, the omnibus and Homer and lemeshow test shows overall significant of the model. Nagelkerke R^2 shows the goodness of fit of the model, the closer Nagelkerke R^2 is to one (1), the fit the model is. The Nagelkerke R^2 above is about -0.223, which show that the model is a good fit.
If the Omnibus test is less than 0.05 percent level of significance, it means the model is significant, and if the Hosmer and Lemeshow test is greater than 0.05 percent level of significance, it means the model is significant. From the table, omnibus test (0.00) is less than 0.05, and the Hosmer &Lemeshow test (0.537) is greater than 0.05, which proves the model to be significant.
The decision rule is that if the p-value is less than 0.05, we reject null hypothesis and conclude that the parameter estimate is statistically significant and vice versa.

The Logit regression shows that penalty effectiveness is dependent on government awareness and bodies involved. A unit increase in bodies responsible and government awareness increases the penalty effectiveness positively.

Findings

- Government awareness has a positive effect on penalty effectiveness, but not statistically significant because its probability value of 0.511 is greater than 0.05 at 5% level of significance.
- Bodies responsible have positive effect on penalty effectiveness, and it is statistically significant because its probability value of 0.35 is less than 0.05 at 5% level of significance.

Evaluation of Working Hypothesis

Test of Hypothesis 1

H_o: there is a negative effect of the activities of households in the informal sector on the environment.

H_1: there is a positive effect of the activities of households in the informal sector on the environment.

Decision: Household size has a significant impact on the adverse effect on pollution, because its probability value of 0.000 is lesser than 0.05 at 5% level of significance. Thus we reject null hypothesis that there is a negative effect of the activities of households in the informal sector on the environment. Hence we conclude that there is a positive effect of the activities of households in the informal sector on the environment in Ikwo LGA.

Test of Hypothesis 2

H_o: the government has not effectively curbed pollution caused by the informal sector.

H_1: the government has effectively curbed pollution caused by the informal sector.

Decision: Government awareness does not have a significant impact on the penalty effectiveness, because its probability value of 0.511 is higher than 0.05 at 5% level of significance. Thus we reject alternative hypothesis that the government have effectively curbed pollution caused by the informal sector. Hence we conclude that the government have not effectively curbed pollution caused by the informal sector in Ikwo LGA.

CONCLUSION AND RECOMMENDATIONS

The goal of this paper is to determine the effect of main objective of this study which is to examine the activities of the informal sector in Ikwo and its impact on environmental pollution, as well as the cost of managing their activities. But the first objective is to determine the effect of informal sector activities on the environment. In Ikwo LGA. The other objective is to ascertain the extent to which government bodies have effectively curbed pollution caused by informal sector activities. After the analysis, it was discovered that socio-demographic factor (Gender, Age, Occupation, Educational qualification), positively influenced the level of pollution, however, HHSize positively influenced the level of pollution and also proved to be statistically significant. The paper recommended as follows:

a. The government should enforce effective environmental laws to be adhered by the informal sector as well as households, thereby promoting sanitation.

   After the analysis, it was proven that the businesses involved in the area of the research were not registered. This automatically posits that tax imposition is not even thought of. It is therefore recommended that government get the said businesses registered, and put under effective and watched over tax imposition. The results gotten from the analysis prove that household size positively contributes to the pollution faced in the environment; it is therefore recommended that government impose effective environmental laws, and days of sanitation that must be strictly followed.

b. Businesses involved in the informal sector should be registered, and appropriate penalties should be made effective for defaulters of environmental laws

   Penalties are not felt by law/tax defaulters, because, there was never one in the first place. Government should therefore endeavor to get the businesses responsible for these excesses registered first, and then impose penalties on defaulters. This having been put in place, would reduce the pollution level, and retain good sanitation.

c. There should be active government bodies, who would be responsible for monitoring the activities in the informal sector

   Many laws and tax imposition which was placed to bring orderliness in places of concern have actually failed in most cases because, they are not properly monitored. This also applies to the informal sector, and this leads us back to a more disorganized and highly polluted society. Government, however, are to assign active and effective bodies who would take the responsibility of time-to-time monitoring of the informal sector and household's activities. They are also responsible for

confirming if the defaulters are appropriately fined. By so doing, environmental sanitation and societal organization would be restored.

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SUSTAINABILITY PRACTICES AND FINANCIAL PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN NIGERIA

Ihemeje, James C.
Michael Okpara University of Agriculture Umudike
Corresponding author: ihemeje.james@mouau,edu.ng

ABSTRACT
Sustainability is the lifeline of any organization that begins with its people. Sustainability is meeting the needs of the present without compromising the ability of future generations to meet their own needs it is an approach to creating true and real value to systems. The pillars of sustainability, economic, social and environmental, have been linked to improve business performance when entrenched into long term strategies of a business. To address the challenges of power supply, multiple taxation, pollution and waste management faced in the business environment, it is imperative to develop solutions that will not compromise future needs yet meeting the needs of the present. Recycling, recovery and reuse, safe work initiatives, continuous learning are strategies businesses can adopt to reduce environmental waste, social and economic issues. For this purpose, this paper examined sustainability practices of businesses from selected manufacturing, banking and hospitality industries based on availability of sustainability reports of industry leaders. This study aims at empirically exploring the influence of sustainability practices on the financial performance of seventy-one listed Nigerian manufacturing companies as at year 2021. The multiple regression analysis for analysis. The research findings indicate a positive relationship between corporate sustainability and financial performance that is measured by earnings yield, return on asset, return on equity and return on capital employed. However, when it comes to a market-based financial measure of Tobin's Q, the result is inconclusive. Finally, to improve financial performance, firms are recommended to engaging in Dow Jones Sustainability Index, prepare their sustainability report in accordance with Global best practices. It was also recommended that to ensure sustainable business practices, business leaders need to develop processes, structures to meet up with the requirements of green practices while still focusing on achieving the strategic goals of the business. Enterprises should evade routines that can trigger changes to the climate, hydro resources, forestry, and embrace alternative sources of energy like solar, energy saving bulbs etc. Disclosing sustainable practices of companies helps maintain transparency about risks and opportunities faced as a business, alleviating negative ecological, social and governance impacts and improving the reputation of the brands. Conglomerates manufacturing companies should disclose sustainability reports yearly; shareholders and the general public are aware of the true value, assets and practices of the organizations.
Keywords: Sustainability; sustainable development; green initiatives; financial performance

INTRODUCTION
Sustainability is an emerging and rapidly growing interdisciplinary field of research,closely related to the economic implications of environmental issues for different industries and firms, and the need of transition to a sustainable economy. Yet, there is no denying that the practices of sustainable development have triggered transformation in a wide range of industries. In this regard, many companies are already aware of the significance of latest trends and are making use of go-green business models with integrated corporate social responsibilities, while larger,more established corporations are moving towards the production of more environmentally friendly and safe goods to meet social demands (Sauve, Bernard, Sloan (Sauve et al., 2016). To deal with the consequences of climate change, human beings have been trying to find new ways of revolutionizing the economy. In the decades following World War II, development was defined primarily in economic terms and measured by growth in countries' gross domestic product (GDP) and per capita incomes (Harrison, 1996). Nevertheless, several authors in the late 1980s and early 1990s proposed a different theory about what constituted development, conceptualized as "human devel-opment" (Desai, 1991; Streeten, 1994). Accordingly, development needs to be about human well-being, expanding people's choices and freedom. Though important, economic growth is not sufficient for full development. Over the past three decades, in parallel with human development, another powerful concept-sustainable development-also attracts a great deal of attention from scholars and authors on the discussion of new economic models (Khasanov, 2016). These two mutually enrich each other and gradually confirm the idea that if not being sustainable, the development path cannot claim the title of human development. There may exists some difference in theoretical approaches,however,human being is

at the center of these concepts. For years, responding to environmental issues has always been a no-win proposition for businesses (Walley & Whitehead, 1994). In this new world, both the businesses and the environment can be winning. Put it another way, going green is no longer an obstacle of doing business, as it is a catalyst for renovation and innovation, new market opportunities and the wealth maximization.

This paper is intended to contribute to the debate of assessing and forecasting the dynamics of a sustainable development in Sweden-a developed country in Northern Europe,especially where there have been a few researches about this relation in the contemporary era. Through integrating and expanding the previous theoretical framework of sustainability evaluation, the thesis aims at empirically quantifying the relationships among critical factors (economic development, social values,resources and environment) that affect the corporate financial performance. The research relevance is defined by the need of establishing a theoretical and empirical basis of sustainability practice for the transition era and identifying evaluative criteria for assessing its impact on business financial situation.

REVIEW OF LITERATURE

Conceptual Framework

Although sustainability is a modern problem in the economies of developed world, the paper is successful in leveraging on certain past studies as a guide for variable selection as well as methodology. Some of these studies are briefly discussed as follows.

In this day and age, the concepts "sustainability" and "sustainable development"have become buzzwords. However, it is a challenge to universally define sustainability, sustainable development and other related terms. This section discusses the definition of these phrases from previously published literature, gives a brief summary of some components of the definition, and explains the meaning of the terms in this research.From 1970s to the 1990s, sustainability was primarily linked to environmental concerns.Remarkably, a global action programme for sustainable development was established at 1992UN Conference on Environment and Development (UNCED). One of the vital outputs was Agenda 21 which offered guidance and practices on sustainability with the focus on environmental aspects (Drexhage & Murphy, 2010). Furthermore, today's modern business world greatly contributes to the debate on sustainability concerns. From entrepreneurial perspective, sustainability talks about a corporation's willing and capacity to last in time in terms of financial performance and resource management. According to Doane and MacGillivray (2001), business sustainability is the business of staying in business. These three pillars cover many areas of development, from urban to agriculture developmenttransportation, infrastructure, energy consumption, water access and electricity availability. They are (1) Economic sustainability, (2) Environmental sustainability and (3) Social sustainabilit. It is of great importance for strategic leaders and officials to be constantly aware of the interactions,complementarities and trade-offs among the pillars. Only then will they be able to ensure responsible human behaviors and actions at individual, regional, national, international levels.

The origin of the "sustainable development" concept dates back to more than 50 years ago. For the first time in 1969, the term appeared in an official document which was signed by 33 African countries, under the auspices of the International Union for Conservation of Nature (IUCN) (Uribe *et al.,* 2018). Sustainable development was described as the "economic development that may have benefits for current and future generations without harming the planet's resources or biological organisms" in the law that made up the National Environmental Policy Act (NEPA) (Green, 2017). Up to here, one might wonder, how does sustainable development differ from sustainability?There is no fine line between one thing and the other, of course. Yet sustainability is often considered a long-term goal or vision, for example, a sustainable enterprise or a sustainable world, while sustainable development consistsof several approaches, processes and pathways to achieve that target, for instance, crop rotation, sustainable agriculture and forestry, well-structured governance, technology advances, usage of recycled materials or renewable resources,construction of a new community in a previously undeveloped area without destroying the ecosystem or harming the environment, etc. (UNESCO, 2020).

Financial performance is understood as the degree to which financial targets have been accomplished. Measuring financial performance has become a central issue in both academia and business world, as enterprises are challenged to produce effective outcomes. Most corporate strategy analysis applies either accounting-or market-based measures to operationalize firm financial performance: (1) an accounting indicator is the company's net profit, and (2) the market measure is market value of the firm at the end of the fiscal year (Belkaoui & Picur, 1993). The relationship between sustainability and financial performance Though definitions are a good tool to understand the notions, several attempts have been made to go beyond such simple definitions and determine a series of principles or interconnections.On the negative

impact between sustainability and financial performance, as argued by Friedman (1970), there exists exactly one social responsibility of business: to manage its resources and involve in activities aimed at enhancing profits. Companies participating in sustainability practices are incurring more expenses, thus aggravating these firms' ability to demonstrate positive financial results. On that account, it is supposed that if leaders make any investment which is not advantageous to staff, shareholders or clients, they are abusing the company's resources. Preston and O'Bannon's (Preston & O'Bannon, 1997) managerial opportunism hypothesis suggest social responsibility in companies has an adverse effect on financial performance. To specify, if financial results show positive trends, managers reduce social expenditure to enrich their personal gains. In contrast, they may seek to compensate for dissatisfactory financial results by taking part in ostentatious social programs.

Jensen (2002) argued that business managers who seek sustainability solutions would interfere with the goal of firm value maximization. Empirically investigating 50 largest US and Japanese companies, Ho and Taylor (2007) recognized that TBL (triple bottom line) reporting decreased with firm profitability, measured by ROA. López et al. (2007) analyzed a sample of 110 companies, using DJSI (Dow Jones Sustainability Index) and DJGI (Dow Jones Global Index). They concluded that corporate social responsibility (CSR) and firm performance, calculated as Profit before tax (PBT)growthwere negatively correlated in the short term. The link between performance indicators and DJSI is also found to be negative.

On the positive impact between sustainability and financial performance, Montabon *et al.* (2007) analyzed the relationship between sustainability management practices and such business financial measures as return on investment (ROI) and sales growth. The study demonstrates that a wide range of environmental management practices (EMPs) is positively associated with multiple firm performance measures. The finding is supported by the slack resource theory and good management theory (Waddock & Graves, 1997). Applying questionnaire-based survey research, Fauzi and Idris (2009) studied items representing variables like corporate financial performance, business strategy, organizational structure, control system, etc., thereby affirming a positive relationship between corporate financial performance and corporate social performance. In their analysis, López *et al.* (2007) showed a connection between Dow Jones Sustainability Index (DJSI) and corporate social responsibility policies.

In 2010, Kapoor and Sandhu took Indian companies for their research and confirmed a positive impact of sustainability performance and return on sales (ROS), return on asset (ROA), and return on equity (ROE), but insignificant impact on growth. Amouzesh *et al.* (2011) examined the relation between sustainable growth rate and firm performance for a sample of 54 firms listed in the Iran financial market in a 4-year period from 2006 to 2009. The study reveals that the deviation of actual growth rate from sustainable growth rate is having significant association with ROA and P/B ratios.Conducting on a global scale, a research by Ameer and Othman (2012) examined 100 sustain-able global companies in 2008. It found that companies which put more emphasis on sustainable practices achieve higher financial performance represented by ROA, profit before tax (PBT), and cash flow from operating activities than those without such commitments.One year later, Strand (2013) demonstrated that a corporation with a management team putting more emphasis on corporate social responsibility is three times more likely to be engaged in Dow Jones Sustainability Index (DJSI). Pan *et al.* (2014) analyzed 228 mineral firms in China and concluded that sustainability had a positive impact on firm's profits, measured by ROA, ROE and Earnings per share (EPS).

In 2017, Rahim investigated a case study in Malaysia with the data consisting of 226 companies from all sectors (except for a financial sector) of Bursa Malaysia from 2005 to 2015. The author found out a significant relationship between debt ratio, equity ratio, total asset turnover and size of the firm with sustainable growth rate.

Finally,regarding the neutral link between sustainability and firm financial performance,Aupperle *et al.* (1985) described a surprising result. In an article published in The Academy of Management Journal, they observed no statistically significant interactions between sustainable development and financial performance. Accordingly, having a corporate social responsibility committee does not ensure that a firm is more profitable than others. In their research,Alexander and Buchholz (1978) deepened the issue by considering the performance of a group of market shares. They did not find any significant relationship between CSR and either of these two variables, indeed.

Inoue and Lee (2011) conducted a study about companies operated in four tourism-related industries (hotel, restaurant, airline and casino), and CSR were divided into five different dimensions. From that, the authors saw various impacts of each sustainability dimension on each industry: not all five dimensions had positive effects on both short-and long-term profitability of the companies, assessed by ROA and Tobin's

Q. Focusing on the energy sector and banking sector, Nunes *et al.* (2012) indicated that there were no differences between sustainable companies and the others when they were evaluated by the accounting variables such as ROA, ROE, asset turnover, and net margin.

Hussain et al. (2018) analyzed the sustainability reports of the 100 best-performing USfirms,using sustainable disclosure indexes which are environmental, social and governance (ESG para-meters). Their findings reveal that no ESG parameter is significantly related to financial performanceestimated using both the accounting performance (ROA and ROE) and the market-based performance (Tobin's Q). Oftentimes, sustainable activities are is perceived as a waste of organizational resources that could be better invested in other projects, ventures, or distributed to share-holders (McWilliams et al., 2006).

Based on the previous literature it can be observed that studies have concentrated on the effect of sustainability and financial performance. However, the previous results representing inconsistency.Some scholars believed that the sustainability affect positively to financial performance (Ameer & Othman, 2012; Amouzesh *et al.,* 2011; Kapoor & Sandhu, 2010), meanwhile some others had reverse relation (for instance, Hussain *et al*., 2018; Inoue & Lee,2011). Surprisingly, some authors reported the no link between sustainability and firms' financial performance (Aupperle *et al*., 1985). Therefore,to confirm about this relationship, the current study proposes the following hypothesis.

METHODOLOGY

The main aim of the work is to define whether it is possible to boost financial results byintegrating environmental strategies into thebusiness operations.It is possible to generalize the methodology of research through three phases. First of all, data is collected for research purpose. The study selects a research sample of 116 listed companies in Sweden in the year 2019. Then, a combination of analytical methods is applied to conduct analysis. These are methods of descriptive statistics, correlation analysis, hypothesis testing and multiple regression analysis. A multiple regression model will be built up that can shed light on the relations across social, economic and environmental indicators. Finally, conclusions are drawn and the results would therefore include relative data comparison and conclusive support for future research.The following generic model is used to test the hypotheses:

Financial performance = *f*(Dow Jones Sustainability Index, Global Compact,Global Reporting Initiative,Corporate Social Responsibility Disclosure, Corporate Social Responsibility Rank,Sustainable Growth Rate, Asset, Sales, Number of Employees).

Generally, researchers often make use of accounting and market-based measures which provide an appropriate and more comprehensive evaluation of firms.Many have found that accounting-based metrics, such as ROA, ROE, and profit margin, are applied for the firm's short-term performance while the firm's market-based result is calculated using Tobin's Q and stock returns as indicators of potential long-term growth. Financial measurements used in this research is presented in Table 1.

From the concept of sustainability to the formation of sustainability indexes, there are several approaches to assess how firms, communities and countries are going on with the principles of sustainable development. It is essential to be eco-friendlier, in every area of our lives, but how are we supposed to assess the company's environmental sustainability? Though there have been many previous works on sustainability, there is still little agreement about how to measure sustainability within companies. As maintained by Montiel and Ceballos (Montiel & Delgado-Ceballos, 2014).

Table 1. Financial measurements used in this research is presented

Table 1. Financial variables (financial performance used as de		pendent variables)
Financial variables		Description
Market-based	Tobin's Q	Tobin's Q = Market Capitalization/ Total Assets
	EY	Earnings Yield =Earnings per Share for the most recent 12-month period/Current Market Price per Share
Accounting-based	ROA	Return on Assets = Net Income/ Total Assets
	ROE	Return on Equity et Income/ Shareholder's Equity
	ROCE	Return on Capital Employed=Profit/Loss before Tax/ Capital Employed

Source; Authors Survey, 2023

key data collection approaches to value sustainability results. The first method is to rely on secondary sources for some sustainability indexes to measure corporate sustainability. Among the most widely used indicators are, say, the Dow Jones Sustainability Index (DJSI), the Global Sustainability Leaders Index (GSLI), the FTSE4Good Developed Index, the Supplier CSR Rating,the Ethibel Sustainability Index (ESI), Global Reporting Initiative Index (GRI), etc. (Diez-Cañamero *et al.,* 2020). Since many Swedish companies are included in the sustainability rating databases and thanks to available accessibility and appropriateness, it is apt to apply secondary databases. Sustainability measurements used in this research is presented in Table 2.

When analyzing the relation between corporate sustainability performance and financial performance, it is necessary to take into consideration the factors that can provide insight and affect the result of a company. Failure to do so could lead to bias in the outcome (Saunders et al., 2012)or endogeneity-a serious issue for scholars (Darnell, 2017). Some of the most common control variables employed by authors are industry/sector, risk,leverage level and firm size (which is an effort to control for the possibility that CSR is a luxury good). Firm size can be measured in a range of ways, including natural log of sales and natural log of total assets. For the empirical analysis, the work formulates a multivariate regression model. To conduct the statistical analysis, the thesis uses the econometric software Eviews 11, which is widely used in the empirical research world, to run the OLS regression.

The population consists of Swedish companies listed on the OMX in the year 2019. The information was obtained from the Osiris Bureau van Dijk, accessed by my UWE account. The initial number is 801companies; however, it is understandable that not all financial and non-financial data of these firms are available. For example, there is missing data when no value is stored for such variables as return on asset, return on equity, return on capital employed, number of employees,sustainable growth rate, etc. The population is reduced to 359 firms. In light of the content analysis of CSR disclosure,Dow Jones sustainability index or Global Compact engagement, because the data had to be collected manually, the paper has excluded the companies that have no relevant information. All data were secondary data. The final sample consists of data from 116 companies.

Following the literature review, the thesis will derive sub-hypotheses and focus on testing statistically the relationship between sustainability and financial performance.

The equation is as follows:

$$FP = c + B_1' DJI + \theta_2^2 \cdot 5G + \theta_3 \cdot \tau R + \theta_4 \cdot \tau_5' RAN + \theta_6 \cdot RATE + \theta_7 \cdot 2NA5SET + \theta_8 . 2NENP + \epsilon$$

Financial performance (FP) is the dependent variable, which is represented by Tobin's Q,ROA (Return on Assets), ROE (Return on equity), ROCE (Return on Capital Employed) and EY (Earnings Yield). Independent variables like DJSI (Dow Jones Sustainability Index), GC (Global Compact), GRI (Global Reporting Initiative), CSRD (Corporate Social Responsibility Disclosure), RANK (Corporate Social Responsibility Ranking) and RATE (Sustainable Growth Rate) define different dimensions of sustainability. LNASSET is used as control variables which consider company size by taking the natural logarithm of the assets.

Finally, ε is the error term (disturbance term) which represents all other factors (unpredictable elements or omitted variables) that are not included in the model.
We have the following sub-models:

$$(1) Hiohia = c + \theta_1^* vji + \theta_2 sC + \theta_3^* s(RR) + \theta_4^* csRD + \theta_5 \cdot RANK + \theta_6 \cdot RATE + \theta_{7,}^* MASSE + \epsilon$$

(2)

$$EV = c + \theta_1^* vji + \theta_2 c + \theta_3^* cRl + \theta_4^* cSRD + \theta_5 \cdot^* AMK + \theta_6^* RATE + \theta_7^* NA5SET + \epsilon 3) ROA$$
$$= c + B_1^+ 0JI + \theta_2 C + \theta_3 \cdot GR + + \theta_4^+ \cdot (SRD + \theta_5 \cdot RAN + \theta_6^+ RAIE + \theta_2 \cdot 1NASSET + \epsilon$$
$$1ROE = c + \theta_1' DJI + \theta_2 SC + \theta_3^* 6R1 + \theta_4^* + (SRD + \theta_5^* RANK + \theta_6^* RATE + \theta_7^* NASSE +$$
$$(5) c + \theta_1^+ DJI + \theta_2 GC + \theta_3^* GRI + \theta_4^* CSRD + \theta_5^* RANK + \theta_6^* RATE + \theta_7^* NA_5 SET$$

RESULTS AND DISCUSSIONS

Table 2 shows the results of the company's performance level in general statistical measurements such as mean, standard deviation, and variance respectively.

Table 2. Descriptive statistics for the sample

	CSRD	DJSI	EY	GC	GRI	LnAsset	RANK	RATE	ROA	ROCE	ROE	TobinQ
Mean	0.85	0.14	12.54	0.52	0.31	13.97	68.37	5.38	6.18	10.35	14.00	1.33
Median	1.00	0.00	6.29	1.00	0.00	13.79	77.50	8.45	5.40	10.31	13.90	0.91
Maximum	1.00	1.00	264.99	1.00	1.00	17.85	99.00	210.53	97.61	57.36	210.53	11.88
Minimum	0.00	0.00	1.17	0.00	0.00	10.40	1.00	-274.3	-34.8	-59.5	-73.62	0.03
Std. Dev.	0.36	0.35	31.25	0.50	0.37	1.59	27.09	36.20	12.12	12.40	25.32	1.61
Skewness	-2.00	2.10	6.71	-0.07	0.57	0.04	-0.89	-2.64	3.38	-1.04	3.43	4.64
N	116	116	116	116	116	116	116	116	116	116	116	116

Source: Authors Computation using Eviews 11

In terms of sustainability performance, corporate responsibility rankings of firms range from a low of zero to a high of 99 with a mean score of 77.5.The sustainable growth rates recorded by Osiris,as the second measure of CSR, range from -274 to 210 with a slightly positive mean of 5.4.Finally,the rating in GRI standard, whose score ranges from 0 to 1, presents a mean of 0.30.mThe mean value of dummy variables ranges from 0 to 1 in the summary statistics. Mean of CSRD shows that about 85% firms annually prepare sustainability reports or sustainability disclosures while the other 15% do not, which implies that the majority of Swedish firms use sustainable reports to review their sustainability activities.The mean value of DJSI reveals that only about 14% Swedish companies are related to the index. Approximate a half (51%) of the sample firms have signed the Global Compact (GC) since it was launched in 2000.

Finally,as for financial indicators, the maximum and minimum values of ROA are 97.61 and -34.83; for ROE, they are 210.53 and -73.62; and, for ROCE these are 57.36 and -59.53. The respective mean values are 6.18, 13.99, and 10.34.

When it comes to market-based financial measurements, the average Swedish firm has an earnings yield of 12.54%, which is relatively low since the range of the figure is from 6.3% to 265%.Tobin's Q value demonstrates a minimum of 0.03 and a maximum of 11.85, while the mean of which is only 1.32.

The Durbin-Watson (DW) test has been conducted to check the autocorrelation within the pro-posed data. Theoretically, DW statistic lies between 0 and 4, with each circumstance giving different meanings. Generally, an acceptable range is 1.50-2.50 (Durbin-Watson,).

Table 3. Test for autocorrelation

Dependent variables	Durbin-Watson value
Tobin's Q	2.128
EY	1.979
ROA	2.251
ROE	2.152
ROCE	1.978

Source: Authors Computation using Eviews 11

From the results in Table 3, the dependent variables have DW values ranging from 1.978 to 2.251.This reveals that there is almost no autocorrelation within the variables of the study.
In the first four models, p-value<α=5%, so we should reject the null hypothesis, meaning then we have heteroskedasticity. In the last model,p-value>: $> \alpha = 5\%$,%, therefore heteroskedasticity is not present and we do accept the null hypothesis.Since there is heteroskedasticity presence in the regressions that are carried out, we can get better estimators of the coefficients if we can correct for the heteroskedasticity using Weighted Least Squares.After correcting heteroskedasticity for the first model, all models do not present problems of heteroscedasticity.

Table 4 displays the correlation matrix for all non-dummy variables in the regression model for the sample Swedish firms in this research.

	TobinQ	EY	ROA	ROE	ROCE	DJSI	GC	GRI	CSRD	RANK	RATE	LnAsset
TobinQ	1	-0.16	0.34	0.23	0.42	-0.02	-0.15	-0.13	-0.30	-0.16	0.10	-0.15
EY	-0.16	1	0.39	0.41	-0.12	0.14	0.05	0.06	0.09	0.18	0.33	0.12
ROA	0.34	0.39	1	0.96	0.52	0.26	0.03	0.10	-0.07	0.05	0.57	0.17
ROE	0.23	0.41	0.96	1	0.52	0.25	0.08	0.11	-0.09	0.08	0.63	0.19
ROCE	0.42	-0.12	0.52	0.52	1	0.05	0.20	0.00	-0.21	-0.06	0.27	0.20
DJSI	-0.02	0.14	0.26	0.25	0.05	1	0.14	0.22	0.10	0.27	-0.02	0.40
GC	-0.15	0.05	0.03	0.08	0.20	0.14	1	0.30	0.09	0.41	0.10	0.39
GRI	-0.13	0.06	0.10	0.11	0.00	0.218	0.30	1	0.28	0.53	0.12	0.42
CSRD	-0.30	0.09	-0.07	-0.09	-0.21	0.10	0.09	0.28	1	0.24	-0.09	0.27
RANK	-0.16	0.18	0.05	0.08	-0.06	0.27	0.41	0.53	0.24	1	0.05	0.41
RATE	0.10	0.33	0.57	0.63	0.27	-0.02	0.10	0.12	-0.09	0.05	1	0.09

Source: Authors Computation using Eviews 11
Tobin's Q shows a weak positive relationship with sustainable growth rate at 10%. Earnings yield and sustainable growth rate show a significant positive correlation at 33%. This support the hypothesis that there is a positive relationship between corporate sustainability activities and financial performance.
Moreover,ROA, ROE, and sustainable growth rate have a positive correlation at 57% and 63%,respectively. This could further support the idea that firms with higher sustainable growth rate achieve higher returns on asset and equity. Dow Jones Sustainability Index (DJSI) is also a sustainable sign of a better financial result. Besides, Global Compact commitment and sustain-able growth rate matter a lot when it comes to Return on Capital Employed (ROCE),with the correlations being 19% and 26%, respectively.
After correcting heteroskedasticity for the first model, the output is presented in the following Table 6.P-value of the regression coefficients of the independent variables CSRD is less than 0.05, so this variable is meaningful in explaining the dependent variable at 95% confidence level.The regression coefficient of CSRD is less than 0; thus, it has the opposite directional impact on the dependent variable.
$Tob \in Q = 3.2329 + 0.22$
=3.2329+0.2276DJSI-0.3246GC-0.0019GRI-1.1817CSRD-0.0035RANK +0.0041RATE-0.0391LNASSET+ε
Briefly, CSRD affects the firm's financial result while GC, GRI, RANK and RATE do not affect the firm's Tobin's Q value.

Table 5. Regression coefficient

	s after correcting heteroskedast	icity for models 1, 2, 3, 4, and 5		
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Model 1: Tobin's Q is dependent va	Riable			
C	3.2329	1.4956	2.1617	0.0328
DJSI	0.2276	0.4635	0.4910	0.6244
GC	-0.3246	0.3335	-0.9732	0.3326
GRI	-0.0019	0.4885	-0.0040	0.9968
CSRD	-1.1817	0.4398	-2.6868	0.0084
RANK	-0.0035	0.0068	-0.5104	0.6108
RATE	0.0041	0.0041	0.9936	0.3226
LNASSET	-0.0391	0.1159	-0.3369	0.7368
Model 2: EY is dependent variable				
C	-12.3073	28.1530	-0.4372	0.6629
DJSI	10.5152	8.7258	1.2051	0.2308
GC	-3.7310	6.2783	-0.5943	0.5536
GRI	-10.1397	9.1962	-1.1026	0.2727
CSRD	8.4926	8.2792	1.0258	0.3073
RANK	0.2190	0.1288	1.7007	0.0919
RATE	0.3072	0.0774	3.9708	0.0001
LNASSET	0.3258	2.1819	0.1493	0.8816
Model 3: ROA is dependent variable				
C	-0.015692	9.242842	-0.001698	0.9986
DJSI	9.370384	2.864748	3.270927	0.0014
GC	-1.923992	2.061215	-0.933426	0.3527
GRI	0.102353	3.019185	0.033901	0.9730
CSRD	-1.858167	2.718108	-0.683625	0.4957
RANK	-0.012896	0.042278	-0.305028	0.7609
RATE	0.190973	0.025403	7.517756	0.0000

Table 5.(Continued)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNASSET	0.523403	0.716343	0.73066	0.4666
Model 4: ROE is dependent variable				
C	-3.851438	18.03257	-0.213582	0.8313
DJSI	18.3285	5.589056	3.279354	0.0014
GC	-1.848222	4.021383	-0.459599	0.6467
GRI	-1.505745	5.890358	-0.255629	0.7987
CSRD	-5.255763	5.302965	-0.991099	0.3239
RANK	-0.012108	0.082484	-0.14679	0.8836
RATE	0.442189	0.049561	8.922208	0.0000
LNASSET	1.408355	1.397568	1.007718	0.3158

Model 5: ROCE is dependent variab	le			
C	-7.788427	10.95121	-0.711194	0.4785
DJSI	0.327853	3.394243	0.096591	0.9232
GC	4.312566	2.442192	1.765859	0.0802
GRI	-1.016376	3.577224	-0.284124	0.7769
CSRD	-7.854182	3.2205	-2.438809	0.0164
RANK	-0.0839	0.050093	-1.674896	0.0968
RATE	0.074495	0.030098	2.475055	0.0149
LNASSET	2.019695	0.848746	2.379624	0.0191

For the second model, it is clear that p-values of all variables except RATE are higher than 0.01, meaning they are insignificant in illuminating the firm's earnings yield. The regression coefficient of RATE is positive, which reveals directional effects on the dependent variable which is EY.

We arrive at the following regression equation: .3073+10.5152DJSI-3.7310GC-10.1397GRI+8.4926+0.2190RANK

$EY = -12.3073 + 10.5.1397GRI + 8.4926CSRD + 0.21 + 0.3072RATE + 0.3$
+0.3072RATE+0.3258LNASSET+ε

Regarding ROA, when p-value of the regression coefficients of the independent variables DJSI and RATE are smaller than 0.01, the result is trumpeted as significant at 99% confidence level.

The coefficients of variables GC, CSRD and RANK are all negative, hence it means that there is an inverse relationship between the two parameters tested.A positive coefficient of RATE means that for every unit increase in sustainable growth rate, we expect a 19% increase in ROA, holding all other variables constant.

We only accept the hypothesis that companies having a higher sustainable growth rate achieve a higher return on assets. We arrive at the following regression equation:

$ROA = -0.015692 + 9.370384G$-0.015692+9.370384GC-1.923992GC+0.102353GRI-1.858167CSRD-0.012896RANK $+0.190973RATE + 0.523403L$

Looking at the regression result of model 4, one can see that the p-value of the regression coefficients of such variables as DJSI and RATE are less than 0.01, so these variables are proved to be statistically significant for the model at the corresponding confidence level of 99%.

The coefficients of DJSI, RATE and LNASSET are positive, meaning they have a direct connection with the outcome variable. On the contrary, other variables are negatively related to ROE value. The interpretation is that for every 1-unit increase in either rating in DJSI or sustainable growth rate, ROE will increase by either 18.32 or 0.44 times, respectively, holding constant all of the other predictors in the model.

The regression equation is:

$ROE = -3.851438 + 18.32$851438+18.3285DJSI-1.848222GC-1.505745GRI-5.255763CSRD-0.012108RANK $+0.442189RATE + 1.40835$0.442189RATE+1.408355LNASSET+ε

Looking at the p-values of CSRD, RATE and LNASSET, we can assume that these indicators are significant at 95% level of confidence.

The coefficients of all variables are positive, describing a direct relationship between the two measures. To illustrate, a positive coefficient of RATE means that for every unit increase in sustainable growth rate, we expect a nearly 1.5% increase in ROCE, with all other variables being constant.

We can conclude the following regression equation:

$ROCE = 0.4785 + 0.9320JT + 0.08026C + 0.77696KR + 0.01645R0 + 0.0968RAN/K + 0.01$968RANK +0.0149RATE $+0.0191LNASSET + \epsilon$

The main results are: ·higher sustainable growth rate leads to a greater value for EY ·greater sustainable growth rates and engagements in DJSI lead to greater ROA and ROE · greater values in sustainable growth rate and corporate social responsibility disclosure lead to a greater ROCE

CONCLUSIONS AND RECOMMENDATIONS

The goal of this analysis was to examine the connection between corporate sustainability success and financial results among Swedish companies. In addition, the study adds to the current corporate sustainability literature by considering other financial result measures, with earnings yield (EY) being a market-based indicator and return on capital employed (ROCE) being an accounting-based one. Hence, managerial decisions should be constantly focused on sustainability concerns.

Accordingly, a positive association between organizational sustainability success and financial results has been expected. The exploratory results confirm that the adoption of some specific sustainability practices s significantly and positively associated with EY, ROA, ROE and ROCE. Nevertheless, further tests have indicated that the relationship is more complex than initially thought, i.e., there are positive relationships for such indicators as DJSI and RATE,and a negative relation for CSRD.

It is evident that investment in sustainable growth and the subsequent inclusion of Swedish enterprises, beyond promoting access to financial resources and enhancing its reputation,offer economic merits that affect thefirm value. Indeed, a company's inclusion in the DJSI,which is a proxy for environmental and social efficiency, would result in higher financial returns. The CSRD is a type of voluntary disclosure, which is used by corporations to promote public awareness, boost their reputation, and shield themselves from society blaming. A sustainability report may include offers extensive and in-depth statistics on the sustainable development of the business in a well-structured and objective way, allowing investors to gain new insights into the results of the company.

With CSRD, a company can legitimize its behavior and affect expectations of various stake-holders (Haniffa & Hudaib,2006). Logically, having a good reputation greatly contributes to enhancing Swedish firms' earnings yield.

Broadly speaking, the research draws attention to the added values for Swedish managers to conform to the sustainability practices. It is critical for the Board of Directors to recognize that social and environment initiatives are an important part of the policy.

As regards to sustainable growth rate, microeconomic policies should aim to enhance sustainable growth rate, as the decision in managing the financial and operating activities towards the growth of the company is related to its performance. Some firms, for example, implement environmental, or water, or waste management schemes to leverage cost efficiencies and thereby boost their bottom line. Since such programs would usually be seen as embracing sustainable practices to help achieving economic success, there arises a question whether a company would expect to gain a real competitive advantage merely by adopting them.Indeed, by applying common practices, a firm can benefit by being recognized as legitimate, or in other words, being the same as its peers.

Some sustainability practices, namely, sustainability report preparation, are simply becoming "best practice" of the industry and are thus required. However, it is obvious that certain businesses are building a real competitive edge by embracing environmental policies that their rivals cannot easily follow. The results suggest that sustainability can be both a necessity and a differentiator.

In order to improve business sustainability, the most frequent opinion in this matter is that the Swedish government should bring in a target to keep track of the sustainable guidelines and foster a more qualitative reporting by national companies. Stronger measures are bound to be introducedand legislation with compulsory consequence analysis ought to be investigated and pro-posed, so that companies operating in distinct areas and sectors can follow.

Despite these promising results, there are also certain limitations in need of reflection, including limited geographical and temporal scope; predominantly with a geographical focus at Sweden level; the complicated measurement of corporate sustainability; and possible risk of biased results due to subjective interpretations of the outcomes and not only of the methodology.

Future research should aim to extend this research to both European and international contexts, given the availability of the data required for the empirical analysis. Moreover, it would be of great use to analyze whether the results obtained are confirmed or not for broader time horizons. Certainly, both accounting-based and market-based measures of financial performance should be used as they are more appropriate for long-term financial performance analysis.

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IMPACT OF DOMESTIC DEBT ON THE NIGERIAN ECONOMY

Obiekwe, Chinelo J., Onuegbu, Onyekachi and Onyebu, Monica
Michael Okpara University of Agriculture Umudike
Corresponding author: c.obiekwe@yahoo.com

ABSTRACT
The study examined the impact of domestic debt on the Nigerian economy. The secondary data was sourced from the debt management office and CBN statistical bulletin. Multiple regression of the ordinary least square (OLS) technique was adopted. The result revealed that domestic debt has a positive but insignificant impact on Nigeria's gross domestic product. In contrast, domestic debt service payment has a positive and significant impact on the grossdomestic product of Nigeria, which is in line with the studies conducted by some scholars that can be seen in the main workrecommends that the government should discourage domestic borrowing (debt) and encourage the increase of its revenue base through tax reform programmes, that government should seek fixed interest payment, varying amortization schemes and multi-year rescheduling and Debt Management Office (DMO) should set mechanism in motion to ensure that loans (debt/borrowings) were utilized for the purpose forwhich they were acquired, as well as set a ceiling for borrowing for states and federal government based on well-defined criteria.
Keywords: Domestic Debt, Nigerian Economy,Domestic Debt Service Payment,Domestic Debt Burden, Growth, Development, GrossDomestic Product.

INTRODUCTION
Whether domestic or externally sourced, debt remains a key instrument used by policymakers to spur the economic activities of a nation in order to put the economy on the part of growth and development. It is interesting to note that debt in itself is not bad as a nation nor individual can attain a substantial level of growth without contracting debt from time to time. A country that cannot service its debt makes borrowing an issue of concern (Charan, 1999). Debt is an essential source of finance mainly used to supplement the government funds for supporting development and other needs of a country. However, if the debt is not in income generating and productive activities, the ability of a debtor nation to achieve economic growth and poverty reduction in a nation (Ayadi, 2009).
Debt is that portion of a nation's fund sourced from individuals, corporate organizations and countries to complement its revenue to meet some developmental project. It could be sourced domestically or externally; when sourced from individuals and organizations within the borrowing country, it is called domestic or internal borrowing. It mostly comes via the sale of government treasury bills and bonds Nigeria, like other developing countries, had faced domestic financial constraints. This constraint has made debt an essential complement to domestic resources for promoting sustainable economic growth. However, debt accumulation should not signify the slow economic growth of the borrowing countries. In Nigeria, the debt service burden has become a severe issue. The 2017 budget set outside 1.66 trillion naira only for debt service payments far above the capital and recurrent expenditure (Asogwa, 2005).
Governments, including Nigeria, borrow to fill the vacuum created by the fiscal gaps in the proposed expenditure and expected revenue within a fiscal period. Suppose the government does not want to compromise macroeconomic stability by printing more money and limiting government taxation capability; in that case, debt becomes the only revenue the government can explore to provide overhead capital for the citizenry (Adejuwon, 2010). However, borrowing should be channeled to meaningful economic activities; the government should borrow to finance capital projects and not recurrent expenses. In other words, governments should not borrow for consumption purposes. Part of Nigeria's challenge is the government borrowing to consume and pay salaries.
The increasing fiscal deficits driven by the higher level of debt servicing are a significant threat to the growth of Nigeria's economy, and the resultant effect of significant debt accumulation exposes the nation to a high debt burden. Nigeria is about the richest nation on the continent of Africa, yet due to the numerous macro-economic problems such as inflation, unemployment, mono-product (sole dependency on crude oil as a significant source of revenue), corruption and mounting debt service payment, majority of her citizen fall below the poverty line of $1.5 therefore, this study seeks to examine the impact of domestic debt on the Nigerian economy (Odozi, 1996).
Meanwhile, the impact of domestic debt on the Nigerian economy has produced mixed results and generated debate among scholars, which has yet to be conclusive. Some believed that the domestic debt burden negatively impacts the economy, while others reported a positive impact on the economy.

Temporarily, due to Nigeria's high debt profile, Nigeria remains among the top most indebted countries in the world despite the cancellation of some external debt by the London Club. Unfortunately, successive governments in Nigeria overlooked the adverse effects of domestic and external debt and focused only on the positive impact when contracting loans (Igbodika *et al.*, 2016). It has been noted that debt does not necessarily imply slow economic growth but is a nation's inability to meet its debt service payments obligations fueled by inadequate knowledge of the nature, structure and magnitude of the debt in question that breeds economic hardship and woes in a country (Noko, 2014). It is no exaggeration that this is the major problem faced by most developing countries, including Nigeria. The inability of the Nigerian economy to effectively meet its debt servicing requirements has exposed the nation to a high debt service burden. The resultant effect of this debt service burden creates additional problems for the nation, particularly the increasing fiscal deficit driven by a higher level of debt servicing. This poses a grave threat to the economy as a large chunk of the nation's hard-earned revenue is being eaten up by debt servicing (Uma &Obidike, 2013).
Nigeria, an oil-rich state, was buoyant until the late 1970s when she took her first loan. Since then, incessant cases of borrowing from the international community have been at very high-interest rates. Dependence on oil revenue, importation of goods and services and over-estimation of budget led to further borrowing. The federal government's inability to pay large amounts of money to repay the principal and interest of borrowed capital has accumulated arrears. It has attracted penalties that put an unbearable burden on the economy and the masses. Managing debt called for information on social stabilization programmes; foreign countries insist on articulating and implementing austerity measures as a precondition for negotiating terms - from rescheduling, refinancing and servicing debt to unblocking lines of credit. It is believed that debt service puts the government in a position where less attention and resources are allocated to core areas of the economy like education, health, and poverty alleviation. It is also believed that debt weakens our trading position and resources, so we cannot trade fairly. There is this notion that to revive our country, we must break from domestic and external debt (Asahi, 2005).
Managing the debt service burden entails reducing the country's domestic and external debt burden. According to the Debt Management Office (DMO), over 50% of Nigeria's budget is allocated to servicing her debt, not repaying capital borrowing. This has severe implications for the Nigerian economy. It is based on these inconsistent scenarios and the inclusive results of previous scholars that necessitated this study to examine and focus on the impact of domestic debt anddomestic debt service payment on the gross domestic product in Nigeria.

LITERATURE REVIEW

Nexus between Domestic debt and Gross Domestic Product Nexus

Domestic debts refer to the portion of a country's debt borrowed from within the confines of the country. These loans are usually obtained from the Central Bank of Nigeria, deposit money banks, discount houses and other non-bank financial houses. Domestic debts originate within a country's geographical region and are contracted through debt instruments such as treasury bills, certificates and bonds. Others are development stocks, FGN bonds and Promissory notes (Igbodika *et al.*, 2016). Meanwhile, Debt is the resource or money used in an organization that is not contributed by its owner and does not in any other way belong to them. It is a liability represented by a financial instrument or other formal equivalent (Sene, 2004).
Gross domestic product is the total value of goods and services produced within a country during a year. It can be calculated by adding up the value of all goods and services produced in different industries during the year (Sanusi, 2010).

Debt Service payment and Gross Domestic Product (GDP)

The concept of debt service payment refers to the interest rate used as debt servicing to pay the creditor country. This implies to the money required to pay the principal and interest on an outstanding debt for a particular period of time. While the gross domestic product (GDP) implies to the standard measures of the value added created via the production of goods and services in a nation or country during a certain period of time. As such, it also measures the income earned from that production or the total amount spent on final goods and services then less importations (Uma *et al.*, 2013).

External debt

External debt could be seen as that portion of a country's debt acquired from foreign sources such as foreign corporations, government or financial institutions. External debt is part of a country's total debt owed to creditors outside the country. The debtors can be the government, corporations or private households (Okonjo, 2012).

Economic development

This refers to the increase in the standard of living in a nation's population with sustained growth from a simple, low-income economy to a modern, high-income economy. It also involves achieving a balance in all sectors of the Economy in producing goods and services, be it agriculture, finance, manufacturing, health, education and others. The Economic challenges inherent in the Nigeria Economy include social issues such as poverty, low per-capital income, inequitable distribution of homes, low capital formation, inefficiency in the mobilization of resources, over-dependence on a singular commodity, oil as a major source of income, Unemployment, inflation to mention a few.

Theoretical Background

The neoclassical growth theory

According to the Neoclassical growth theory, debt directly affects economic growth. This is because if used optimally, the amount borrowed is anticipated to increase investment. As long as countries use the borrowed funds for productive investment and do not suffer from macroeconomic instability, policies that distort economic incentives or sizable adverse shocks, growth should increase and allow for timely debt repayment. On the other hand, the indirect effect of debts is its effect on investment. The transmission mechanism through which debts affect growth is its reduction of the resources available for investment by debt servicing. Also, public debt can act as an implicit tax on the resources generated by a country and create a burden on future generations, which comes in the form of a reduced flow of income from a lower stock of private capital. This, in turn, may lead to an increase in long-term interest rates, a crowding out of private investments necessary for productivity growth, and a reduction in capital accumulation.

Debt- cum - growth model

The original non-optimizing approach was advanced in the framework of "Debt-cum-growth" literature, in which emphasis has mainly been on foreign borrowing for investment purposes, that is, for filling the gap between domestic investment and saving. The Debt-cum-Growth Model considers debt capacity in terms of the benefit and cost of borrowing in economic growth. The basic argument is that a country will maintain its capacity to service debt provided that additions to its debt over time contribute (sufficiently) to growth. A 'debt' cycle is proposed, in which the behaviour of capital flows may change over several stages closely linked to economic growth. The merit of the debt cum-growth mode lies in its summary of the complexities of the debt growth mechanics into a simple and readily understandable insight, namely that any debt strategy will only work, ultimately, if there is sufficient economic growth to support it.

However, in terms of analyzing debt capacity in a more specific manner, the Debt-cum-Growth Model framework needs several conceptual problems relating to its theoretical underpinning and the rigidity of its basic assumptions. A particular weakness is that the model focuses solely on the saving-investment gap. However, given that external financing will have been made available in foreign currency, the saving surplus will somehow be converted into foreign exchange. By not considering the performance of the external sector of the economy, the Debt cum-Growth Model is silent on this transformation problem.

The profligacy theory

The profligacy theory thesis attempts to correct the weakness of the Debt cum-growth model by focusing on the institutional arrangement under which a loan was contracted. The profligacy thesis, a component of the system stability theory, recognizes that the debt crisis arose from weak institutions and policies that have wasted resources through unbridled official corruption and damaged living standards and development.

The dependency theory

The Dependency theory originated from developing countries themselves in the 1770s. This theory is based on the assumption that resources flow from a "periphery" of poor and underdeveloped states to a "core" of wealthy states, thereby enriching the latter at the expense of the farmer. Dependency theory states that the poverty of the countries in the periphery is not because they are not integrated or fully integrated into the world system, as is often argued by free-market economists, but because of how they are integrated into the system. From this standpoint, a typical school of thought is the bourgeoisie scholars. To them, the state of underdevelopment and the constant dependence of less developed countries on developed countries result from their domestic mishaps. They believe this issue can be explained by their lack of close integration, diffusion of capital, low level of technology, poor institutional framework, bad leadership, corruption, and mismanagement. They see the under-development and dependency of third-world countries as being internally inflicted rather than externally afflicted. To this school of thought, a

way out of the problem is for third-world countries to seek foreign aid, loans, and investment. Moreover, it allows for the undisrupted operations of multinational corporations (MNCs). Due to the underdeveloped nature of most LDCs, they depend on the developed nations for virtually everything ranging from technology, aid, and technical assistance to culture. The dependent position of most underdeveloped countries has made them vulnerable to the products of the Western metropolitan countries
and Breton Woods institutions. The dependency theory gives a detailed account of the factors responsible for the position of developing countries and their constant and continuous reliance on external aid for their economic growth and development.

The Keynesian theory

Keynes views fiscal policy as the best policy that brings about economic growth since it acts in the general public's interest. According to Keynes, when the government embark on public borrowing to finance its expenditure, unemployed funds are withdrawn from the private pockets such that the consumption level of private individuals remains unaffected. When injected back into the economy by the government, these funds lead to multiple increases in aggregate demand, causing an increase in output and employment. Hence, public borrowing can influence the macroeconomic performance of the economy. On the other hand, the indirect effect of public borrowing is its effect on investment. The transmission mechanism through which debts affect growth is its reduction of the resources available for investment by debt servicing. Also, public debt can act as an implicit tax on the resources generated by a country and create a burden on future generations, which comes in the form of a reduced flow of income from a lower stock of private capital. This, in turn, may lead to an increase in long-term interest rates, a crowding out of private investments necessary for productivity growth, and a reduction in capital accumulation.

Threshold School of Thought (Debt-Later Curve Thesis)

The burden of external debt is the concern of the threshold school of thought, which emphasizes the non-linear relationship between debt and growth (Calvo, 1998). It links debt and growth to the problem of capital flight, where growth falls at high debt levels. According to the threshold theory, the fall in growth is due to the higher distortionary tax burden on capital required to service the debt. It leads to a lower rate of return on capital, lower investment and hence lower growth. It maintains that low debt regimes have higher growth rates and lower strands of thought in the debt–growth nexus and sees external debt as capital inflow with a positive effect on domestic savings and investment and, thus, on growth, which leads to poverty reduction via appropriate targeting of domestic savings and investment (Calvo, 1998). Some economists do not view external debt as indispensable for the economic development of LDCs. To them, public debt, both external and internal but mainly external, does not help in overcoming balance of payment difficulties and does not avoid inflationary pressures. In their opinion, public debt encourages governments of LDCs to embark on ambitious and ambiguous plans involving large expenditures financed by inflationary monetary and fiscal policies and run down their external reserve.

Ricardo's Theory of Public Debt

Ricardo's theory of public debt was based on an emphasis on the fact that the primary burden to the community was derived from the wasteful nature of public expenditure itself rather than from the methods adopted to finance such expenditure. Regarding financing public expenditure, his view was that the requisite funds would ultimately have to be drawn from the liquid resources of the community and that in point of economy, it would make no significant difference whether such funds were raised by taxes or by loans. However, where the
funds were raised through the latter, it would be referred to as public debt. External debt involves debt servicing, which usually requires payment in foreign currency. Meanwhile, the continued increase or decrease in demand for foreign currency tends to influence the exchange rate.

Meanwhile, this study was anchored on Neoclassical growth theory, which states that debt directly affects economic growth. This is because if used optimally, the amount borrowed is anticipated to increase investment. As long as countries use the borrowed funds for productive investment and do not suffer from macroeconomic instability, policies that distort economic incentives or sizable adverse shocks, growth should increase and allow for timely debt repayment.

Empirical Review

Many studies exist on the impact of domestic debt on the Nigerian economy. Among them are Choong *et al.* (2010) on the effect of different types of debts on Malaysia's economic growth from 1970 to 2006. Using the co-integration test, the findings suggest that all components of debts have a negative effect on long-run economic growth. Meanwhile, Barik (2012) studied the direct and indirect effects of public debt on India's economic growth between 1981 and 2011. His econometric investigation revealed an indirect connection between public debt and India's economic growth within the period. He discovered that both investment

and output growth indirectly positively affected economic growth through its influence on investment. He recommended that it is not enough to raise public debt but to put measures in place to stabilize them both in the medium and long term.

In Nigeria, Uma *et al.* (2013) investigated the influence of total domestic debt, total external debt cum servicing of external debt on the economic development of Nigeria from 1970-2010. The study started with the battery test of stationarity of time series data using the Augmented Dickey-Fuller test and the Johansen test for co-integration to ascertain the long-run relationship of the variables. Ordinary Least Squares were used to analyze the data. The results show that total domestic and external debts are inversely related to real gross domestic product, a proxy for economic development, but at an insignificant level. Interest on total external debt relates positively to real gross domestic product, contrary to our expectations, but at an insignificant level. On this basis, they recommend that the government must be sincere and focus more on internally generated revenue to finance development projects until all the debts and interests are finally settled.

Amassoma (2011) examined the causal nexus between external debt, domestic debt and economic growth in Nigeria between 1970 and 2009 using a Vector Autoregressive (VAR) and a Vector Error Correction (VEC) models. They found that whereas there was no long relationship between domestic debt and economic growth, external debt and economic growth showed a long-run relationship. He also found a bi-directional causality between domestic debt and economic growth and a unidirectional causality from economic growth to external debt in Nigeria.

Asogwa (2005) employs a more comprehensive technique in investigating the effect of domestic debt on economic growth, concluding that domestic government debt in Nigeria has continued to suffer a form of confidence crisis as market participants have consistently shown a greater unwillingness to hold longer maturities. The government has only been able to issue more short-term debt instruments.

Tajudeen (2012) examined the causal nexus between total public debt (external and domestic debt) and economic growth in Nigeria between 1970 and 2010 using a Vector Autoregressive (VAR). The Augmented Dickey-Fuller and Philip Peron test results showed that the variables were stationary at first difference. A co-integration test was also performed, and the result revealed the presence of co-integration between public debt and economic growth. The co-integration results show that public debt and economic growth have a long-run relationship. The findings of the VAR model revealed a bi-directional causality between public debt and economic growth in Nigeria. He recommended that the government should be sincere with the loans it obtains by channelling them towards development
of the economy rather than diverting it into private pockets.

Okon (2013) investigated the relative impact or potency of both external and domestic debts on the performance of the Nigerian economy with emphasis on which of the debt types exert more impact or influence on the significant macroeconomic variables of per capita GDP and gross domestic investment. They obtained time series data from various sources from 1970 to 2011 and were subjected to econometric analyses. The result reveals that external debt is superior to domestic debt in terms of economic growth, and external debt and not domestic debt crowd out domestic investment in Nigeria. They concluded that the government should have recourse to domestic market-based borrowing in order to help mobilize domestic savings and stimulate domestic investment in Nigeria.

ThankGod (2014) examined the impact of public debt on private investment in Nigeria over the period 1981 – 2012 using the instrumental variable technique of estimation and bootstrapping technique for the computation of normal-based standard errors for the turning points. The results show that domestic debt has a linear and positive impact on private investment, external debt has a U-shaped impact on private investment, and private consumption expenditure has a negative impact on private investment. The external debt turning point was estimated to be 124.69 per cent and was statistically significant at the 1% level. Therefore, the study recommended that for Nigeria to benefit from government external borrowings, such funds should be large enough compared to her GDP and invested in productive ventures.

Emmanuel (2012) focused on the impact of public debt on economic growth in Nigeria. He showed that the joint impact of debt on economic growth is negative and quite significant in the long run but becomes positive in the short run. This was attributed to incompetent debt management.

Igbodika *et al.* (2016), examined the empirical relationship between domestic debt and the performance of Nigerian economy using data spanning (1987-2014). The study used secondary data collected from Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics. The study used the Ordinary Least Square (OLS) model. The result from the findings showed that interest rate has inverse significant relationship with Gross Domestic Product in Nigeria, there was a positive significant relationship between domestic debt and Gross Domestic Product in Nigeria. The coefficient of determination indicates that

about 68% of the variations in gross domestic product can be explained by changes in domestic debt variables (DMD, INT, INFR) in Nigeria. This implies that a good portion of gross domestic product trends in Nigeria is explained by domestic debt variables. The study therefore concluded and recommend that government should maintain a debt bank deposit ratio below 35 percent and resort to increase use of tax revenue to finance its projects as it is our believe that tax revenue is far from the optimum, that government should divest itself of all projects which the private sector can handle including refining crude oil (petroleum product) and transportation but should provide enabling environment for private sector investors such as tax holidays, subsidies, guarantees and most importantly improved infrastructure.

Abula and Ben (2016), examined the impact of public debt on economic development of Nigeria using annual time series data spanning 1986 to 2014. The study employed the Augmented Dickey-Fuller test, Johansen co-integration test, Error Correction Method (ECM) and the Granger Causality test. The Johansen co-integration test results revealed the presence of a long-run relationship among the variables viz; external debt stock, domestic debt stock, external debt servicing, domestic debt servicing and economic development (proxied with GDP per capita) in Nigeria. The ECM results revealed that external debt stock and external debt servicing have insignificant negative relationship with economic development in Nigeria, however, domestic debt stock has a direct and significant relationship with economic development while domestic debt service payment was significant but inversely related to economic development in Nigeria. The lagged error correction terms in ECM 1 and ECM 2 equations are high and statistically significant judging from its high and negatively signed coefficient. The study therefore recommended that the government should reduce the level of external debt it accumulates overtime, but domestic debt accumulation would contribute significantly to the development of the economy.

Jakob (2005), showed in his study that low income countries like Nigeria have a tradition in borrowing to finance huge capital projects like the debt procured by the government for its own use. He employed a cross - sectional survey of the role of domestic debt market in sub-Saharan African based on data set of 27 countries between (1980-2000) 20 years' periods. He finds out that domestic markets in these countries are more generally small, involves short and medium term and a very narrow investor's base. It also pinpointed that there exist significant differences among the size, cost, and maturity structure of domestic debt markets in heavily indebted poor countries. He further discovered from his study that domestic interest rate payment present a significant burden to their budget despite much smaller domestic debt than foreign debt which in turn affects private investment and growth at large.

Adenike *et al.* (2007), reviewed the roles of debt management practices on sustainable economic growth and development with particular emphasis on Nigeria. The analysis of the data collected using the Ordinary Least Square regression method with descriptive statistics shows that, availability of access to external finance strongly influences the economic development process of any nation. Debt is an important resource needed to support sustainable economic growth. But a huge external debt without servicing as it is the case for Nigeria before year 2000 constituted a major impediment to the revitalization of her shattered economy as well as the alleviation of debilitating poverty.

Barro (1978) investigates the effect of domestic debt on economic growth using the unanticipated component of domestic debt, or the debt stock and growth. He concludes that the unanticipated component of domestic debt affects growth. Kormendi (1983), used a cross-section study of 34 countries. The sample extends widely from the highly-developed countries (the USA, the UK, Japan and Australia) to the underdeveloped countries (Sri Lanka). He concludes that debt and growth are not related. However, many of his critics viewed that the aggregation of such diverse groups may not yield meaningful results. While, Charan (1999), investigates the relationship between domestic debt and economic growth for India using the co-integration and Granger causality tests for India for the period 1959-95. Co-integration and Granger causality tests support the Ricardian equivalence hypothesis between domestic debt and economic growth. Ricardian equivalence suggests that it does not matter whether a government finances its spending with debt or a tax increase; the effect on total level of demand in an economy is the same.

Christensen (2005) uses a cross-country survey of the role of domestic debt markets in sub-Saharan Africa based on a new data set of 27 sub-Saharan African countries during the 20-year period (1980-2000) and found out that domestic markets in these countries are generally small, highly short term and often have a narrower investor base. He also found out that domestic interest rate payments present a significant burden to the budget with significant crowding-out effects.

Abbas (2007) & Abbas and Christensen (2010), examined optimal domestic debt levels in low income countries (including 40 sub-Saharan Africa countries) and emerging markets between 1975 and 2004 and found that moderate levels of marketable domestic debt as a percentage of GDP have significant positive

effects on economic growth. The study provided evidence that debt levels exceeding 35% of total bank deposits have negative impact on economic growth.

Gurley and Shaw (1973), observed that mounting volume of public debt is a necessary feature of a strong and healthy financial structure of an economy and some secular increase in public debt should be planned by every government. Patillo (2002), in their study assessed the non-linear impact of external debt on growth using a panel data of 93 countries over 1969-98 employing econometric methodologies. Their findings suggested the average impact of debt becomes negative at about 160-170 %of exports or 35-40% of GDP. Their findings also show that the marginal impact of debt starts being negative at about half of these values. Were (2001), in her study of Sub Saharan Africa (SSA) stated that SSA is still plagued by its heavy external debt burden compounded by massive poverty and structural weaknesses of most of the economies, which has made attainment of rapid and sustainable growth and development difficult.

Maana (2008), examines the impact of domestic debt in the Kenyan economy using the Barro Growth Regression Model (BGRM). The results indicate that although the composition of Kenya's public debt has shifted in favour of domestic debt. Domestic debt expansion had a positive but not significant effect on economic growth during the period. He further stated that the Barro Model needs a sophisticated data set, which may not be available for a developing country like Kenya.

Ogege and Ekpudu (2010), employs the OLS to test the relationship between debt burden and the growth of the Nigerian economy, and came up with the results that indicates that there is a negative relationship between debt stock and gross domestic products. Here, the focus of the study is on gross domestic product, rather than exchange rate which is the interest of the current study.

Ijeoma (2013), on her part, made use of linear regression model to empirically assess the impact of debt variables, which include external debt stock, external debt service payment on selected macroeconomic variables including gross domestic product and gross capital formation. The results reveal that there is a significant relationship between Nigerian debt service payment and gross fixed capital formation. The result further shows that exchange rate fluctuations affect external debt shock, external debt service payment and the nation's economic growth.

Patrawimolporn (2007), evaluates the effect of exchange rate on debt, debt services and public debt management in Thailand, using a simple differentiation technique. His findings reveal that exchange rate volatility affects debt services since a significant amount of debt services was saved when the exchange rate was adjusted. However, the study failed to show the effect of either the public debt or debt services on exchange rate itself. More so, since the study focus on Thailand economy, the findings may not be absolutely applicable to Nigeria. Sene (2004), examines the relationship between external public debt and equilibrium real exchange rate in developing countries using an extension of Obstfield & Rogoff model. The findings show that debt overhang tends to appreciate real exchange rate in the long run. Another author, Lin (1994), examines the steady-state effect of government debt on the real exchange rate within a two-country overlapping generations (OLG) model with production, and came up with findings which indicates that increase in government debt depreciates the real exchange rate of the country. Adofu and Abula (2010) investigate the relationship between domestic and economic growth in Nigeria for the period 1986-2005. Their findings showed that domestic debt has affected the growth of the Nigerian economy negatively and recommended that it be discouraged. They suggested that the Nigerian economy should instead concentrate on widening the tax revenue base. This study investigates the relationship between debt and economic growth in Nigeria using advanced econometric technique.

METHODOLOGY

This study *design was an ex post facto* research design. Data was from the Central Bank of Nigeria (CBN) statistical bulletin and Debt Management Office from 1999 to 2019.

Model Specification.

The study adopted the model of Igbodika et al. (2016) without modification to suit the researcher's objectives. The model is stated below:

Y = *f*(X1, X2, X3)……………………………………………………………………….Eqtn(1)

The model is transformed as follows:

GDP = $\beta_0 + \beta_1$DODT + β_2DOSP + μ………………………………….……………. Eqtn(2)

Where:

Y= Dependent variable

X= Independent variable

GDP= Gross domestic product
DODT = Domestic debt
DOSP = Domestic debt service payment
$\beta_1 - \beta_3$ = Coefficients of the independent variables
β_0 = The intercept/constant value of the equation
μ = Stochastic variable or error term.

RESULT AND DISCUSSIONS

Regression Result

Dependent Variable: GDP
Method: Least Squares
Date: 09/03/22 Time: 01:28
Sample: 1999 2019
Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5342630.	11696369	0.456777	0.6533
DODT	352.2281	258.7029	1.361516	0.1902
DOSP	83043.15	23598.73	3.518968	0.0025

R-squared	0.451189	Mean dependent var	40885556
Adjusted R-squared	0.390210	SD dependent var	26878793
SE of regression	20989394	Akaike info criterion	36.68850
Sum squared resid	7.93E+15	Schwarz criterion	36.83771
Log-likelihood	-382.2292	Hannan-Quinn criter.	36.72088
F-statistic	7.399089	Durbin-Watson stat	0.946728
Prob(F-statistic)	0.004517		

Source: E-view Software package, 9.0.

Test of Hypotheses

Ho_1: Domestic debt has no significant impact on gross domestic product of Nigeria

Test of Hypothesis one

Variable	Coefficient	t-statistic	Prob.
DODT	352.2281	1.361516	0.1902

T-tabulated = 1.76

Source: Extracted from regression result table

Table ... indicates that the coefficient value is352.2281, the T-tabulated value is 1.76, the probability value is 0.1902, and the critical value is1.361516, all at a 0.05% significance level. Since the coefficient value is positive, the critical value is less than the T-tabulated value, and the probability value is higher than the 0.05% level of significance; hence, the null hypothesis is accepted. Therefore, we concluded that domestic debt has a positive but non-significant impact on Nigeria's gross domestic product.

Ho_2: Domestic Debt service payment has no significant impact on gross domestic product in Nigeria.

Test of Hypothesis two

Variable	Coefficient	t-statistic	Prob.
DOSP	83043.15	3.518968	0.0025

T-tabulated = 1.76

Source: Extracted from regression result table

The above table revealed that the critical value is 3.518968, the T-tabulated value is 1.76, while the coefficient value of83043.15 is positive and the probability value is 0.0025 all at 0.05% significance level. So, since the critical value is greater than the T-tabulated value and the coefficient value is positive while the probability value is less than 0.05% significance level, the null hypothesis two is therefore rejected and the study concludes that domestic debt service payment has positive and significant impact on grossdomestic product of Nigeria.

Discussion of findings

The regression results show that in hypothesis one domestic debt has a positive but non-significant impact on the gross domestic product of Nigeria, while in hypothesis two it was revealed that domestic debt service payment has a positive and significant impact on the grossdomestic product of Nigeria. This might be as a result that when domestic debt service payment is made it goes back to circulation in there by boasting production which in turn contribute significantly to the economy.meanwhile, the R^2 (co-efficient of determination) showed that the independent variables accounted for 45.11% of the changes in the dependent variable and the Prob (F-statistic) value of 0.004517 indicates that the overall model is statistically good fit and significant. While, Durbin-Watson stat. value of 0.946728 revealed that serial autocorrelation is not totally absent. So, since the Prob (F-statistic) value of the overall model is statistically good fit and significant, study therefore concludes that domestic debt has significant impact on the Nigerian economy and, this is in-line with the studies conducted by Mbanefo (2013), Obademi and Olalekan (2012) who examined the impact of debt on selected macroeconomic indicators in Nigerian economy and impact of public debt on economic growth in Nigeria respectively. Meanwhile, Amassoma (2011) and Tajudeen (2012), were also support of our findingstheir studies were in line with our findings and they concluded that domestic debt impacted positively of debt on Nigerian economy, which validates our result. This implies that borrowing whether domestic or external debt is not bad when you channel the money or the fund to productive investment which will impact positively to the gross domestic product of the country hence, the debt service payment will not be difficult as government will gain from the increased GDP making the service payment easier for the country.

CONCLUSION AND POLICY IMPLICATION

The study examined the impact of domestic debt on the Nigerian economy. It revealed that domestic debt has a positive but insignificant impact on Nigeria's gross domestic product. In contrast,domestic debt service payment has positive and significant impact on grossdomestic product of Nigeria, which is in-line with the studies conducted by Mbanefo (2013), Obademi and Olalekan (2012), who examined the impact of debt on selected macroeconomic indicators in Nigerian economy and impact of public debt on economic growth in Nigeria respectively. These studies also concluded a positive impact of debt on Nigerian economic growth which validates our result, the study therefore conclude that domestic debt has significant impact on the Nigerian economy. By implication, debt whether domestically or externally borrowed is not bad when you channel the fund to productive motivated industries/investment that will increase and impact positively to the gross domestic product of the country thus, making the debt service payment not been difficult to handle as the government will gain from the increased GDP making the service payment easier for the country to handle its obligations to the creditors.

In line with the findings, the study therefore, recommended that the government discourage domestic borrowing (debt) and encourage the increase of its revenue base through tax reform programmes. Furthermore, the government should seek fixed interest payment, varying amortization schemes and multi-year rescheduling, and Debt Management Office (DMO) should set mechanism in motion to ensure that loans (debt/borrowings) were utilized for the purpose for which they were acquired, as well as set a ceiling for borrowing for states and federal government based on well-defined criteria.

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APPENDIX

Regression Result

Dependent Variable: GDP
Method: Least Squares
Date: 09/03/22 Time: 01:28
Sample: 1999 2019
Included observations: 21

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Sum squared resid	7.93E+15	Schwarz criterion	36.83771
Log-likelihood	-382.2292	Hannan-Quinn criter.	36.72088
F-statistic	7.399089	Durbin-Watson stat	0.946728
Prob(F-statistic)	0.004517		

Source: E-view Software package, 9.0.

IMPACT OF CREDIT RISK MANAGEMENT ON PROFITABILITY OF COMMERCIAL BANKS: THE NIGERIANEXPERIENCE.

Onuegbu Onyekachi, Uremadu, Sebastian O. and Ewurum, Ngozi C.
Michael Okpara University of Agriculture Umudike
Corresponding author: onyekaonu2018 @ gmail.com

ABSTRACT
The study examined the impact of credit risk management on the profitability of commercial banks in Nigeria. This study is needed based on the inconclusive evidence in the related literature reviewed and mixed findings of some past studies that necessitated the present study. A panel of ten (10) commercial banks listed on the floor of the Nigerian stock exchange from 1999 to 2020 was used in the study. The panel unit root test was carried out, and it revealed that all the variables were stationary at certain levels. The study specified the fixed effect and random effect models, and Hausman's test was used to choose the appropriate model. Commercial banks' profitability was measured by return on assets. The Hausman's test turned out significant, which led to the choice of the fixed effect model ahead of the random effect model. Based on the fixed effect model, the study found that non-performing loans had a positive and insignificant impact on return on assets. In contrast, bank loans and advances, bank liquidity ratio, bank credit administration, and bank size positively and significantly impact return on assets. On the other hand, the bank capital adequacy ratio negatively and significantly impacted the return on assets. In contrast, the bank loan loss provision exerted a negative and insignificant impact on the return on assets. The study concluded that credit risk management significantly impacted commercial banks' profitability in Nigeria. Based on the findings of the research study, it is recommended, among others, that regulatory authorities in Nigeria should create and support an endogenous environment where commercial banks in Nigeria could have strong risk management practices by strengthening the bank's internal risk management process of identification, measurement, and monitoring of risks.
Keywords: Credit Risk, Management, Profitability, Commercial banks, Nigeria.

INTRODUCTION

Commercial banks play an active role in every economy through their financial activities in modern societies. One of the main activities of commercial banks worldwide, particularly in Nigeria, is the creation of credit to deserving and deficit units of the economy. Credit creation is the primary income-generating activity for commercial banks, but this activity involves considerable risks to lenders and borrowers. Commercial banks are subjected to various operational risks, such as credit and liquidity and operational and interest rates. A commercial bank with high credit risk has a high bankruptcy risk that would put the depositors in jeopardy. Among commercial banks' risks, credit and liquidity risks get more attention from most commercial banks' management and banking regulators (Kolapo *et al.,* 2012). Credit and liquidity risks could easily lead to failure, especially among commercial banks. Therefore, credit creation calls for prudent management of its associated risks.

Recently, managing risk has become a necessity, not an option. In any venture involving human beings, human beings always pilot an element of risk and financial institutions such as commercial banks. Therefore, they experience challenges such as credit and liquidity risks. Some of the major causes of such challenges are directly associated with low credit standards for borrowers and counterparties, poor portfolio risk management, and lack of attention to economic changes. Commercial banks use customers' deposits to create loans or credit for their borrowers, becoming a revenue mobilization activity for commercial banks. This credit mobilization/creation process exposes commercial banks to high default risks, such as credit risk, which might lead to financial distress, including bankruptcy (Kolapo *et al*., 2012).

According to Sanusi (2010), 'in recent years' excessive credits and financial asset growth went unchecked' and the banking industry, mainly commercial banks, was no doubt the most regulated sector in any economy, including Nigeria, because of the riskiness of its operations. This is why the focus of risk management occupies a vital position in the operational decisions of the bank management. To a large extent, investors and the general public approach commercial banks for loans and advances in large volumes, which constitute risk- assets of banks and necessitate the need for provisioning against them. Therefore, as long as there is a risk, there is a need to manage the risk. Risk management means identifying, assessing, and prioritizing risks followed by coordinated and economical application of

resources to minimize, monitor, and control the probability and influence of unfortunate events. Liquidity risk is the risk that a bank may be unable to meet short-term financial demands. The fundamental role of commercial banks in the maturity transformation of short-term deposits into long-term loans makes commercial banks inherently vulnerable to liquidity risk. Hence, effective liquidity risk management helps to ensure cash flow obligations, which are uncertain as they are affected by external factors.

Commercial banks assume various risks when providing financial services, as lending is their core business activity. The loan portfolio is typically the most significant asset and the primary source of revenue to commercial banks, and it is also one of the most significant sources of risk to a commercial bank's safety and soundness. At the core of credit creation in the banking industry, risk management identifies risks, assesses their implications, decides on a course of action, and evaluates the results. Adequate credit and liquidity risk management seeks to maximize the benefits of a risky situation while minimizing the adverse effects of the risk. Adequate management of credit and liquidity risk in commercial banks in Nigeria is critical for their survival, growth, and profitability. Commercial bank management must thoroughly know each portfolio composition or mix, industry and geographic concentrations of credits, average risk ratings, and other aggregate characteristics to accomplish this. They must be sure that the policies, processes, and practices implemented to control the risks of individual loans and portfolio segments are sound and that lending officers adhere to them. It is also pertinent to note that commercial banks are useful to economic growth through their financial services. Their intermediation role is a substance for economic growth. The efficient and effective profitability of the commercial banking industry over time is an index of financial stability in any nation, including Nigeria. The extent to which a commercial bank extends credit to its customers and the general public for productive activities accelerates a nation's economic growth and long-term sustainability. Commercial banks' credit and liquidity functions enhance investors' ability to exploit desired profitable ventures.

However, despite the creation of a risk management department in most commercial banks, which is responsible for managing commercial banks' risks, including credit and liquidity risks, available records showed that bad loans (non-performing loans) were as high as 35% in Nigerian commercial banks between 1999 and 2009 (Sanusi, 2010). The increasing level of non-performing loan rates in commercial banks' books, poor loan processing, undue interference in the loan granting process, and inadequate or absence of loan collaterals, among other things, were linked with poor and ineffective credit risk management that had negatively impacted commercial banks' profitability. This is an alarming phenomenon because the high level of non-performing assets in the commercial banks' portfolio, if not brought under control, might erode the capital base of the commercial banks and reduce their profitability level. In the worst case, liquidation or bankruptcy occurs due to the commercial banks' inability to manage their credit and liquidity risk efficiently.

Therefore, the inconclusive evidence in related literature reviewed and mixed findings of the past studies such as (Yuga, 2017; Abubakar *et al.,* 2016; Alshatti, 2015; Lalon, 2015; Li & Zou, 2014; Ejoh *et al.*, 2014; Epure & Lafuente, 2012; Al-Khouri, 2011; Hamisu, 2011; Onang'o, 2017; Simeyo *et al.*, 2016; Olusanmi *et al.,* 2015; Godwin & Comfort, 2015; Olamide *et al.*, 2015; Olawale, 2014; Kithinji, 2010; Chukwunulu *et al.,* 2019; Tegegne, 2018; Etale & Ujuju, 2018; Syed, 2017; Idowu *et al.,* 2017; Olawele *et al.,* 2016; Tomola *et al.*, 2015; Kodithuwakku, 2015; Almumani, 2013; Kolapo *et al.,* 2012), necessitated the pres15(1), 1-16.ent study to ascertain the true state of affairs.

This study examined impact of credit risk management on profitability of commercial banks in Nigerian, and specifically the study; ascertained what effects management of credit risk proxied by volume of non-performing loans ratio have on commercial banks' profitability in Nigeria, examined nature and magnitude of impact bank loans and advances have on profitability of commercial banks in Nigeria, ascertained if bank capital adequacy ratio has had any effect on profitability of commercial banks in Nigeria, examined nature and magnitude of impact of bank loan loss provisions have had on profitability of commercial banks in Nigeria, ascertained whether magnitude of bank liquidity risk ratios have any impact on profitability of commercial banks in Nigeria, examined nature and magnitude of impact of bank credit administration (cost per loan) would cause on returns on assets of commercial banks in Nigeria, assessed the extent of relationship between bank size (economies of scale) and the profitability of commercial banks in Nigeria.

LITERARURE REVIEW

The Concept of Credit Risk Management

Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of

unfortunate events (Njogo, 2012). Nikolaidou and Vogiazas (2014) opined that credit risk management is the combination of coordinated tasks and activities for controlling and directing risks confronted by an organization by incorporating key risk management tactics and processes related to the organization's objectives. Credit risk mitigation is a range of techniques whereby a bank, such as a commercial bank, could partially protect itself against counterparty default (for example, by taking guarantees or collateral or buying a hedging instrument).

Credit management covers monitoring the use of credit funds until they are fully repaid to the lending bank. According to (Ugwoke, 2016), credit is the right to receive payment on demand or the obligation to make payment on demand or at a future time on account of the immediate transfer of goods or money. This is generally based upon the confidence that the creditor possesses in the ability to pay, the right to receive payment, and the obligation to make payment originate simultaneously in a credit transaction. He further stated that granting credit to customers is a noble objective since both parties benefit from such a transaction. However, the issues of faithfulness and unassessed investment risk have made the otherwise good relationship become something worrisome. Lending is the primary function of banks, and customers benefit from lending since the significant purpose of lending is to improve the country's socio-economic advancement at a profit. Credit management focuses on formulating the company's overall objectives, approval or otherwise of credit requests, granting of credits, recording the transactions, collecting debts, and accounting for those that have become bad debts. Lending administration is the bank's primary control measure to regulate lending.

Commercial banks' liquidity and profitability are based on their ability to administer their lending policy effectively and efficiently. This is why credit administration should not be limited to the loan position. Advances and overdrafts to customers are among the most essential and lucrative aspects of banking (Umole, 1995). These facilities are granted to deserving subjects due to the availability of funds, provision of adequate security, and compliance with credit policy. Risk management is very significant to the operation of any business entity due to the severe consequences that the occurrence of risk portends. It implies that for a business organization to be rest assured of the achievement of its management based on survival and growth, risk management becomes imperative. Risk management does not mean minimizing risk. Instead, risk management aims to optimize risk-reward (Ugwoke, 2016).

Credit risk management greatly influences or prevents the failure of a bank. This is because the failure of a bank is influenced, to a large extent, by the quality of credit decisions and, thus, the quality of the risk assets. Credit risk management provides a leading indicator of the quality of a bank's credit portfolio. The critical elements in effective credit management include a well-developed credit policy framework and procedures, strong portfolio management, adequate credit controls, and well-trained human resources to implement the system. Commercial bank managers must conduct a market definition as a starting point in credit risk management. This also includes the determination of the target markets. Credit policies are necessary to determine the target market and customers and define acceptable and unacceptable risks. The origination credit is usually at the customer's instance. The credit officer must identify why the borrower needs the loan and crosscheck all facts about the proposal, thus having all relevant information for evaluating the proposal. The credit officer should also evaluate the proposal as to the management and nature of the business. After that, the officer must be sure of the source of repayment, ascertain if the proposal fits into the bank's objectives and the government policies in place, assess the government policies in place, assess the business risks that could hinder repayment, and conduct a financial analysis. All the issues here are assessed under the credit analysis.

Theoretical Background

This study is anchored on the Shiftability theory, which states that banks' liquidity is maintained if they hold assets that could be shifted or sold to other lenders or investors for cash. Also, these assets could be shifted to the Central Bank for cash without material loss in case of necessity rather than relying on maturities to solve their liquidity problems (Ngwu, 2006; Uremadu, 2000).

Empirical Reviews

Literature studies on credit and liquidity risk management and commercial banks' profitability exist. The noticeable ones among them are Chukwunulu et al. (2019), who examined risk management and the performance of commercial banks in Nigeria (1994-2016). The study used two banks; the performance indicators (return on assets and return on equity) were used as the dependent variables, while the risk management proxies were credit risk, liquidity risk, operational risk, and capital adequacy risk as the independent variables. The data covered 23 year period between 1994 to 2016. The data was obtained from Nigerian Deposit Insurance Corporation (NDIC) annual reports. The study employed the use of the ordinary least square (OLS) regression technique of analysis. The study revealed that credit risk had a

significant adverse effect on return on equity and an insignificant negative effect on return on assets and that liquidity management had no significant effect on bank performance; also, that operational risk had no significant effect on bank performance in Nigeria, while capital adequacy had a significant positive effect on return on equity but a negative insignificant effect on return on assets.

Ahmad (2018) studied whether risk management practices affect Jordanian commercial banks' profitability. The data on the variables were collected from the annual financial statements of the Jordanian commercial banks. Return on assets was the proxy for the banks' profitability, while liquidity, operational, credit, and market risks were the proxies for risk on management practices. The study employed the ordinary least square analysis technique (Fixed effect and Random effect) to test the hypothesis. The study found that risk management practices are essential in determining the profitability of companies and banks worldwide. The study also revealed that risk management practices explain a significant part of the variation in banks' profitability. Also, only operational risk management practices significantly affect profitability, while liquidity, credit, and market risks have insignificant effects.

Syed (2017) conducted a study on the impact of credit risk management on the performance of commercial banks in Pakistan. The study used secondary data from the SBP publications on the banking sector survey. The study adopted a pooled regression to determine the impact of credit risk management on two performance methods. The findings revealed that credit risk management was inversely associated with bank performance. The return on asset (ROA) analysis revealed that capital adequacy ratio (CAR), loan loss provision ratio (LLPR), liquidity ratio (LR), and non-performing loan ratio (NPLR) variables had a significant impact on return on assets (ROA). The Loan loss provision ratio (LLPR), liquidity ratio (LR), and Non-performing loan ratio (NPLR) had a negative. In contrast, the capital adequacy ratio (CAR), loan and advances (LAR), and SIZE positively impacted the return on assets. Regarding return on equity, the CAR, LAR, and LLPR variables significantly impacted ROE. In their model, the LLPR, NPLR, and LR variables had negative values, and CAR, LAR, and SIZE variables positively impacted the dependent variable. Kodithuwakku (2015) examined the impact of credit risk management on the performance of commercial banks in Sri Lanka using primary and secondary data. The return on assets (ROA) was used as a performance indicator. Loan provision to total loan (LP/TL), loan provision to non-performing loans (LP/NPL), loan provision to total assets (LP/TA), and non-performing loans/ total loans (NPL/TL) were used as indicators of credit risk. The study revealed that non-performing loans and provisions adversely impacted profitability.

Olamide *et al.* (2015) investigated the impact of effective risk management on a bank's financial performance using the data of 14 banks listed on the floor of the Nigerian Stock Exchange from 2006 to 2012. The study showed a negative, non-significant relationship between risk management proxies and the bank's performance as captured with return significance. Other scholars who examined the impact of credit risk management on the profitability of commercial banks include (Gizaw*,* 2015; Olawale, 2014; Li & Zou, 2014; Alalade *et al*. 2014; Ejoh *et al*., 2014; Kolapo *et al.,* 2012; Kargi, 2011; Kithinji, 2010; Ahmad & Ariff, 2007).

Prudent credit risk management policies are vital to the success and profitability of commercial banks, especially in Nigeria. As such, the present study has reviewed various past studies that relate to the present study with several scholars researching various aspects of risk management (Ngugi, 2001; Kuo & Enders, 2004; Kithinji, 2010; Epure & Lafuente, 2012, & Almumani, 2013). However, most of these authors focused their studies outside Nigeria and were in the distant past. This study, therefore, has filled the gap in the literature by expanding the scope and empirically added to the existing literature by explicitly focusing on the Nigerian commercial banking experience using non-performing loan ratios, bank loans, and advances, bank capital adequacy ratio, bank loan loss provisions, bank liquidity risk, bank cost per loan asset ratio and bank size as the independent variables and the commercial banks' profitability proxied by returns on assets as, dependent variable. Besides, the study used more recent data by expanding the scope from (1999 – 2020) twenty-two (22) years.

METHODOLOGY

The study adopted an *ex-post facto* research design to enable the researcher to examine the impact of credit risk management on commercial banks' profitability with the Nigerian experience. The commercial banks used in the study are the First Bank Nigeria Plc, Guaranty Trust Bank Plc (GTB), United Bank for Africa (UBA), Zenith Bank Plc, Access Bank Plc, Fidelity Bank Plc, FCMB Bank Plc, Sterling Bank Plc, Union Bank Plc and EcoBank Plc. The justification for the choice of these ten (10) commercial banks is that they have been regarded as the top ten (10) performing commercial banks in Nigeria, given that their shareholders holding structures, profitability, and general performance are very strong, sound, and active

in the Nigerian banking industry. These selected commercial banks have large numbers of customers and are outstanding active players on the floor of the Nigerian stock exchange. They have been largely steady to the extent that their ownership structures were not affected despite mergers and acquisitions that characterized the revolution in Nigeria's commercial banking industry. This formed the basis for using the purposive sampling technique in this study.

These ten (10) commercial banks' financial statements from 1999 to 2020 were analyzed to address the objectives of the study.

Model Specification

Based on the stated objectives of this study, Yuga's (2017) model was adopted and modified. In his study of "Credit Risk and Commercial Banks' Profitability in Nepal," return on asset (ROA) was used to measure profitability, while default risk, capital adequacy ratio, and cost per loan assets ratio were used as the proxies for credit risk. Therefore, the present study modified and improved Yuga's (2017) model by including liquidity risk ratio, loan loss provision, and loan and advances.

The Yuga's model is re-stated as follows:

$PROF_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 CAR_{it} + \beta_3 CLA_{it} + e_{it}$ ……………………………….. Equ 1.

Where:

PROF = Profitability (Returns on assets)

DR = Default risk (Non-Performing Loans)

CAR = Capital adequacy ratio

CLA = cost per loan assets ratio

β_0 = The intercept of the regression line

$\beta_1, \beta_2, \beta_3$= The slope, which represents the degree with which the independent variable changes by one unit variable. The a *priori* expectation is that the coefficients $\beta_1, \beta_2,$ and $\beta_3 < 0$.

$e$it = error components.

In modifying the above model, the present study added some new variables that are relevant to the study as follows:

Thus, the model for this study shall functionally be expressed as shown below:

ROA= f (NPLs, BLA, BCAR, BLLP, BLQR, BCLA, BS). ……………..…………… Equ2

The econometric equation for the model is then specified as follows:

$ROA_{it} = \beta_0 + \beta_1 NPLs_{it} + \beta_2 BLA_{it} + \beta_3 BCAR_{it} + \beta_4 BLLP_{it} + \beta_5 BLQR_{it} + \beta_6 BCLA_{it} + \beta_7 BS_{it} + e_{it}$ Equ3

Where:

ROA = return on assets

NPLs = Non-performing loans ratio (a proxy for credit default risk)

BLA = Bank loans and advances

BCAR = Bank capital adequacy ratio

BLLP = Bank loan loss provision

BLQR = Bank liquidity risk ratio

BCLA = Bank cost per loan assets ratio

BS = Bank Size (Proxied by the Value of Total Bank Assets)

β_0= the constant

i^{th}, t= i^{th} bank at year t

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ represent the regression coefficients or the parameters estimated

$_{it}$= error term

The *a priori* expectation is that the coefficients $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7 < 0$.

However, this study conducted several diagnostic tests such as Hausman's, normality, stationarity, panel unit root, correlation matrix, and variance inflation factor (VIF) tests. All these tests were conducted to decide whether this study's proposed model was appropriate.

RESULTS AND DISCUSSIONS

Panel Unit Root Tests

The summary techniques of the Levin, Lin, and Chu t-test, ADF – Fisher chi-square, and PP – Fisher chi-square panel unit root tests were engaged in checking the stationarity of the variables for a consequential analysis. The results are shown in Table 1 below:

Table 1: Summary of panel unit root test

Variable	Levin, Lin & Chu T	ADF - Fisher Chi-square	PP– Fisher Chi-square	Status	Remark
ROA	-4.28881 *** (0.0000)	97.7524 *** (0.0000)	581.936 *** (0.0000)	I(0)	Stationary
NPLS	-2.95602 *** (0.0016)	37.1017 ** (0.0114)	66.7204 *** (0.0000)	I(0)	Stationary
BLA	-2.66915 ** (0.0475)	39.8637 *** (0.0065)	68.6136 *** (0.0000)	I(0)	Stationary
BCAR	-1.75241 ** (0.032)	32.0472 ** (0.0111)	58.0483 ** (0.0306)	I(0)	Stationary
BLLP	-2.96088 ** (0.0015)	45.8838 *** (0.0000)	77.9449 *** (0.0000)	I(0)	Stationary
BLQR	-6.09928 *** (0.0000)	88.7799 *** (0.0000)	393.997 *** (0.0000)	I(0)	Stationary
BCLA	-4.17270 *** (0.0000)	32.8472 ** (0.0351)	43.1746 *** (0.0019)	I(0)	Stationary
B SIZE	-1.69210 ** (0.0453)	31.7028 ** (0.0492)	36.8235 ** (0.0123)	I(0)	Stationary

Source: Author's computations (2021) using E-Views 10.0

The result of the unit root tests has shown that all the variables used to conduct the tests were stationary at levels, i.e., 1(0).s

Fixed effects model

Table 2 displayed the fixed effects estimates of the panel least squares:

Table 2: Fixed effects estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPLS	0.208625	0.218639	0.954201	0.3940
BLA	0.018613	0.002882	6.458957	0.0000*
BCAR	-0.072487	0.018189	-3.985153	0.0163
LOG(BLLP)	-0.011800	0.007760	-1.520843	0.1299
BLQR	0.026143	0.005920	4.416350	0.0000*
BCLA	0.073338	0.013900	5.276010	0.0062*
B SIZE	0.113486	0.012521	9.063398	0.0008*
C	0.149957	0.596897	0.251228	0.8140
R-squared	0.697673	Mean dependent var		3.477436
Adjusted R-squared	0.665963	SD dependent var		2.624739
SE of regression	1.031737	Sum squared resid		216.0899
F-statistic	18.84781	Durbin-Watson stat		2.251899
Prob(F-statistic)	0.000000*			

Source: Author's computations (2021) using E-Views 10.0

Note: * Indicates significance at the 1% level. The fixed effects estimate presented in Table 2 revealed that the overall estimated model was good as it had an improved R-squared and Adjusted R-squared of 0.697673 and 0.665963, respectively. It implied that the fixed effects model explained that the independent variables could explain approximately 66.6 percent of the total variation in the dependent variable. Similarly, the F- F-statistic value of 18.84781 and its associated probability value of 0.000000 showed that the overall model was statistically significant at a 1% significance level. Durbin-Watson statistic was 2.251899, which is close to 2. Therefore, there was an absence of a serious autocorrelation in the model. However, a multicollinearity problem was suspected. As such, the fixed effects model was not spurious compared to the pooled regression.

However, the study proceeded with the random effects model to see if it could produce better estimates than the pooled regression and fixed effects model.

Random effects model

The random effects were specified to show that better estimates could be produced than the fixed effects model. The results of the random effects model are displayed in Table 3 as follows:

Table 3: Random effects model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPLS	0.000596	0.010029	0.059443	0.9527
BLA	0.020067	0.005937	3.379916	0.0009*
BCAR	0.018000	0.009626	1.870002	0.0629
LOG(BLLP)	-0.001482	0.001951	-0.759398	0.4485
BLQR	0.021800	0.013025	1.673784	0.0956
BCLA	0.002351	0.000880	2.673161	0.0081*
B SIZE	0.016475	0.011301	1.457854	0.1464
C	0.014175	0.019985	0.709277	0.4789
R-squared	0.564042	Mean dependent var		0.005736*
Adjusted R-squared	0.536440	SD dependent var		0.013697
SE of regression	0.012729	Sum squared resid		0.034348
F-statistic	8.943047	Durbin-Watson stat		1.928815
Prob(F-statistic)	0.000003			

Source: Author's computations (2021) using EViews 10.0

* Significant at 1% level of significance. The random effects estimates in Table 3 displayed stability, as shown by the coefficient of determination, F-statistic, and Durbin-Watson statistic. The coefficients of determination, as shown by the R-squared and Adjusted R-squared, were 0.564042 and 0.536440, respectively, implying that the independent variables explained roughly 53.6 percent of the variations in the dependent variable. The F-statistic (8.943047) and its associated probability value of 0.000003 indicated that the random effects model was stable and well-specified. Also, the Durbin-Watson statistic of 1.928815 was slightly less than the threshold of 2, implying minimal autocorrelation in the model.
Hence, the optimal model selection should be between the fixed and random effects, as both produced stable estimates. As a result, the Hausman's test became necessary.

Choice of optimal model using Hausman's test

The most important practical difference between fixed and random effects is that the random effects are estimated with partial pooling, while fixed effects are not. Partial pooling means that if a group has few data points, the group's effect estimate will be based partially on the more abundant data from other groups (Sheytanova, 2014). The null hypothesis is that the preferred model is random effects; the alternate hypothesis is that the model is fixed effects. The tests look to see if there is a correlation between the unique errors and the regressors in the model. The null hypothesis is that there is no correlation between the two. The Hausman's test is presented in Table 4.8 below:

Table 4: Hausman's test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	36.593974	4	0.0000

Source: Author's computations (2021) using E-Views 10.0

* Significant at 1% level of significance. From Table 4, Hausman's test results showed that the fixed effect model was more appropriate in explainingthe relationship among the given variables in the model. Thus, the study followed the results of the fixed effect model for the interpretation and discussion of the findings from the credit and liquidity risk management and commercial banks' profitability in Nigeria. The decision was taken since the probability value ($0.0000 < 0.05$) led to the acceptance of the alternative hypothesis that the fixed effects model was preferred.

Discussion of Results

Interpretation of the fixed effects estimates

The result of the fixed effects model revealed that the overall estimated model was good, with an Adjusted R-squared of 0.665963. It implied that approximately 66.6% of the total variation in return on assets (ROA) was explained by the independent variables such as non-performing loans ratio (NPLS), bank loans and advances (BLA), bank capital adequacy ratio (BCAR), bank loan loss provisions (BLLP), bank liquidity risk (BLQR), bank credit administration (BCLA) and bank size (BSIZE) while the remaining 33.4 percent unexplained by the aforementioned independent variables were due to other factors that could explain the return on assets as represented by the error term. The F- F-statistic value of 18.84781 and probability (F-statistic) of 0.000000 showed that the overall model was statistically significant at a 1% significance level, implying that the collective impact of the explanatory variables on ROA was significant. The individual estimated coefficients showed that bank capital (BCAR) and bank loan loss provisions (BLLP) had negative coefficients, while the coefficients of the other variables turned out positive. The positive estimated coefficient of non-performing loans (NPLS) showed that a unit increase in non-performing loans led to approximately a 0.21 unit increase in return on assets (ROA). Also, the positive coefficient of bank loans and advances (BLA) indicated that a unit increase in bank loans and advances led to about 0.02 unit increase in ROA. Also, the negative coefficient of bank capital adequacy ratio (BCAR) revealed that a unit change in bank capital adequacy resulted in an approximately 0.07 unit decrease in ROA.
Similarly, the estimated coefficient of BLLP suggested a slight decrease of 0.01 units due to increased bank loan loss provisions. The positive coefficient of bank liquidity ratio (BLQR) indicated that ROA increased by approximately 0.03 units due to bank liquidity. Again, BCLA emerged with a positive coefficient, which indicated that ROA rose by approximately 0.07 units due to an increase in bank credit administration. Furthermore, the positive coefficient of BSIZE showed that ROA increased by about 0.11 units due to an increase in bank size.

Discussion of Findings

The present study has revealed a positive and insignificant impact of non-performing loans on commercial banks' profitability in Nigeria, which implies that commercial banks in Nigeria did not record a high rate of non-performing loans. Another plausible reason for this finding is that the banks cushioned the potential

impact of non-performing loans through proper credit appraisal and monitoring, which led to a quick recovery of the principal sum and accrued interests (Yuga, 2016). On the other hand, studies such as Abubakar *et al*. (2016) and Ugwoke (2016) have stated that banks could reduce loans in periods of crisisto reduce the incidence of non-performing loans. This is against the findings of Kajirwa and Katherine (2019), Kegninkeu (2018), and Syed (2017), who found that non-performing loans exerted a significant impact on commercial banks' performance.

Findings from the regression model also showed that bank loans and advances had a positive and significant impact on commercial banks' profitability in Nigeria. The primary objective of commercial banks' lending is to maximize profit. This finding has shown that the banks generated adequate returns through loans and advances. Interests are paid on loans; hence, more loans and advances would lead to more profitability. This agrees with the credit market theory, which postulates that the terms of credits clear the market. The interest rate is the only price mechanism if collateral and other restrictions (covenants) remain constant. With an increasing demand for credit and a given customer supply, the interest rate rises, and vice versa. This was in line with Etale and Ujuju (2018), Nwude and Okeke (2018), and Nwanna and Oguezue (2017) that loans and advances had a positive and significant impact on commercial banks' profitability.

It was also revealed that the bank capital adequacy ratio (BCAR) negatively and significantly impacted commercial banks' profitability in Nigeria. This finding did not justify why the Central Bank of Nigeria (CBN), as the apex regulator of the banking sector, increased the minimum capital base for commercial banks to ₦25billon in 2005 during the consolidation exercise. This was because capital is indispensable in banking as in any other industrial or commercial enterprise. Its functions change with various stages in the bank's life cycle. At commencement, capital satisfies the statutory minimum requirement and compensates for the lack of profits generally characteristic of the years of operations. This was against the findings of Chukwunulu, Ezeabasili, Igbodika (2019), Akinkunmi (2017), and Syed (2017), but was in line with Etale& Ujuju (2018), who found a negative and insignificant impact of capital adequacy on commercial banks profitability. The difference in the findings could be due to the period, geography, and methodology used for the respective studies.

Loan loss provision was found to have caused a negative and insignificant impact on commercial banks' profitability in Nigeria. This was because as the commercial banks experienced bad debt and made provisions to cushion it, their earnings would drop as they were made out of the bank's earnings. This would further lead to low profitability and overall performance of the commercial banks. This has implied that various policy interventions were yet to improve asset management in line with the proposed distress resolution strategy. Banks in the post-consolidation period are expected to record low loan loss provisions. This finding was in line with Syed (2017), Onang'o (2017), Abubakar et al. (2016), Muriithi *et al.* (2016), Simeyo *et al*. (2016) that loan loss provision caused profitability of commercial banks to decline.

There was a positive and significant impact of bank liquidity ratio on commercial banks' profitability in Nigeria. This has implied that the commercial banks could fund increases in assets and meet obligations as they came due without incurring unacceptable losses. At the same time, effective liquidity risk management helped ensure the bank's ability to meet cash flow obligations, which are uncertain as they are affected by external events and other agents' behavior. This finding aligned with Chukwunulu *et al.* (2019), Etale and Ujuju (2018), and Ahmad (2018) but against Syed (2017), who found a negative and significant impact of liquidity ratio on commercial banks' performance in Nigeria.

The study also found that bank credit administration positively and significantly impacted commercial banks' profitability in Nigeria. The spate of credit administration stems from the Basel II Accord's emphasis on credit risk management practices. Compliance with the Accord means a sound approach to tackling credit risk has been taken, ultimately improving commercial banks' profitability and overall performance in Nigeria. Through the effective management of credit risk exposure, commercial banks not only support the viability and profitability of their own business, but they have also contributed to systemic stability and efficient allocation of capital in the economy. Hence, commercial banks in Nigeria have imbibed effective and efficient credit administration to a large extent. This finding was in line with the studies conducted by Taiwo *et al.* (2017); Simeyo *et al.* (2016); Ugwoke (2016); Kodithuwakku (2015), that proper credit administration reduced credit risk and enhanced profitability of commercial banks.

As expected, bank size positively and significantly impacted commercial banks' profitability in Nigeria. The size of a bank would be relevant to the profitability of banks. Kegninkeu (2018) opined that the capacity to sustain profits over time had remained the first bank's line of defense as it absorbed unexpected losses, strengthened banks' capital base, and, in addition, used to improve future performance through re-investment of the retained earnings. Kajirwa and Katherine (2019) concluded that bank size plays a

significant role in predicting financial performance when considering economies of scale. A bank might leverage on average cost reduction per unit while enhancing efficiency, capital base, and market share. Alshatti (2015) states that a larger bank is more influential in strategic decisions. It has more influence on its stakeholders and competitors and is more efficient and profitable than a small bank. Bank size uniqueness in terms of assets, capital, deposits, and loans influenced the quality of decisions on the activities undertaken by a bank, which, in effect, affected the strength of financial performance (Uwuigbe *et al.*, 2015; Olamide *et al.,* 2015).

CONCLUSION AND RECOMMENDATIONS

The contribution of endogenous commercial banks to the economic growth and development of Nigeria cannot be overemphasized. Having analyzed the impact of credit risk management on the profitability of commercial banks in Nigeria, our results showed that for the overall model, credit and liquidity risk management significantly impacted the profitability of commercial banks in Nigeria. The non-performing loan ratio had a positive and insignificant impact on the return on assets of commercial banks in Nigeria. Bank loans and advances positively and significantly impacted the return on assets of commercial banks in Nigeria. Bank capital adequacy negatively and significantly impacted the return on assets of commercial banks in Nigeria. Loan loss provisions had a negative and insignificant impact on the return on assets of commercial banks in Nigeria. The bank liquidity ratio positively and significantly impacted the return on assets of commercial banks in Nigeria. Bank credit administration and bank size positively and significantly impacted the return on assets of commercial banks in Nigeria. From the model summary of the fixed effect estimates, it was seen that the measures of credit and liquidity risk management collectively explained significant variations in return on assets. From the foregoing, credit risk management significantly impacted the profitability of endogenous commercial banks in Nigeria. Consequently, managers of Nigerian banks must design and implement strategies and policies to stabilize and manage credit and liquidity risk. In line with the findings of the study, the following recommendations have been made to guide policy:

1. Regulatory authorities in Nigeria should(through the Asset Management Corporation of Nigeria, AMCON) create and support an environment where commercial banks in Nigeria can have strong risk management practices by strengthening the bank's internal risk management process of identification, measurement, and monitoring of risks. Hence, the banking sector should adopt an effective credit policy reflected in flexible tenure, restructuring of credit terms, and conversion. This could reduce the tempo of non-performing loans, such that as the return on equity increases, the possibility of default risks would decline considerably.
2. The government should further strengthen institutions charged with granting loans and advances to critical sectors of the economy because of its attendant benefits to the banks and the economy at large. As such, the commercial banks and the Central Bank of Nigeria should create an enabling business environment for companies to access cheap funds to enhance business growth and innovation, which will, in turn, enhance the performance of commercial banks in Nigeria.
3. Commercial banks should establish capital adequacy measures that clearly outline the management's view of organization priorities on profitability. The capital adequacy measures should be continuously updated to reflect changes in the economic outlook of the banks' customers.
4. Commercial banks are advised to monitor the ratio of loans and advances to deposits and avoid excessive mismatch between loans and deposits to safeguard their banks from poor CAMEL ratings. Banks should continue to monitor their capital bases and maintain the minimum capital to risk-weighted assets. Also, they should enhance their capacity in credit analysis and loan administration. At the same time, the regulatory authorities should pay more attention to banks' compliance with relevant provisions of the Bank and other Financial Institutions Act (1999) and prudential guidelines.
5. Commercial bank managers should be aware of the dangers that are imminent from holding excess cash or lack of cash and avoid any of this. Excess cash should be invested in short-term instruments to earn and shore up profit for the stakeholders. At the same time, a watchful eye should be kept to discern when the cash level falls below the required level to avoid customers' ill will and a consequent bank run that could lead to a technical insolvency. Essentially, deposit money banks in Nigeria must balance liquidity and profitability for system stability to hold.
6. The management of commercial banks, especially credit/loan officers, must do diligence by adhering to prudential guidelines when giving out credit facilities. Banks must implement a sound

credit-granting process, ensure compliance with the Know-your-customer (KYC) system, apply effective measures in measuring and monitoring credit, and ensure adequate controls over credit risk. Commercial banks should ensure a guarantee of credits, which would serve as a shield against credit loss of customers' funds. Small banks that are poorly capitalized should not offer specific categories of credit facilities. Thus, the worth of capital for a bank should serve as a shield against loss of depositors" funds. Nigerian commercial banks should be well capitalized even without the "regulatory eyes" of the authorities.

7. Commercial banks in Nigeria should improve their assets and level of capitalization to improve their lending capability and hence financial performance (profitability); commercial banks in Nigeria should minimize their operational cost efficiency and gearing ratio because excess expenditure does have negative and significant impact on banks performance; deposit money banks should leverage on information technology as a means of cost reduction and hence profit improvement; deposit money banks in Nigeria are advised to minimize their non-performing loans through appropriate credit policies and procedures and deposit money banks in Nigeria should consider other quantitative and qualitative approaches of profit improvement than bank size.

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EFFECTS OF MICROFINANCE BANK CREDITS ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) in ABIA STATE

Chikara, Chidinma C., Agbo, G. O. and Amobi, M. U.
Michael Okpara University of Agriculture Umudike
Corresponding author: chikara.chidinma@mouau.edu.ng

ABSTRACT
The study examined the effects of the Microfinance Bank credits on the performance of Small and Medium Enterprises (SMEs) in Abia State. Small and medium enterprises (SMEs) are pivotal to poverty alleviation, entrepreneurial development, and governments' financial inclusion strategies in global economies. However, the inability of the SMEs to adequately access working capital loans to grow and expand their respective businesses through commercial banks stimulated the establishment of microfinance banks to bridge the existing gap. It remains to be seen to what extent the microfinance credit has affected the performance of SMEs in Abia State, thus the study. The specific objectives sought to determine the effects of Microfinance Bank products on the performance of SMEs in Abia State; find out the effects of Microfinance bank credits on the profitability of SMEs in Abia State; ascertain the forms of MFB credits that contribute more to the performance of SMEs in Abia State. The study employed both primary and secondary data in achieving its objectives. The population of this study consists of 3565 SMEs in Abia State. The sample size is 360 and was calculated using Taro Yamane's formula. 360 Questionnaires were administered to 360 respondents, and 352 were received back, representing a 97.78% response rate. The research questions were answered using simple statistical tools such as frequency, percentage, standard deviation, and mean, while null hypotheses were tested using OLS regression. The study found that Microfinance bank products significantly affect the performance of SMES in Abia State ($p = 0.000 < 0.05$). Microfinance Bank credits significantly affect SMEs' profitability in Abia State ($p = 0.000 < 0.05$). All the forms of microfinance Bank credits contribute to the performance of SMEs in Abia State ($p = 0.000 < 0.05$). The study concluded that Microfinance Bank credits significantly and positively affect the performance of Small and Medium Enterprises (SMEs) in Umuahia, Abia State. The study recommended that microfinance banks create more accessible financial products and services tailored to meet the needs of small and medium enterprises. Microfinance Bank credits should be accessible to SMEs with lower interest rates, longer pay-back times, and flexible terms and conditions.
Keywords: Microfinance, Microloans, Performance, Profitability, and SMEs

INTRODUCTION

Small and medium enterprises (SMEs) are pivotal to poverty alleviation, entrepreneurial development, and governments' financial inclusion strategies in global economies. Studies also showed that the contributions of SMEs to nations' economic growth have been universally recognized (Asor *et al.*, 2016). SMEs play a significant role in stabilizing and development of emerging economies. Access to financial services is important to the growth and performance of SMEs. According to Abu & Ezike (2012), the experience of many countries indicates that entrepreneurship, which manifests in the form of SMEs, can meaningfully contribute to attaining the country's economic development objectives. These objectives include employment generation, income redistribution, output expansion, promotion of indigenous entrepreneurship and technology, location of industries among regions of a country, and production of intermediate goods to strengthen inter and intra-industrial
linkages. Access to finance and credit plays a significant role in sustaining livelihoods and developing microenterprises. The formal financial institutions view these enterprises as risky and unprofitable and are, therefore, hesitant to provide such credit to them (Sanya & Polly, 2017). The importance of financial intermediation in economic growth has occupied a prominent position in financial economics literature in recent decades (Andabai & Jessie, 2019). Microfinance Banks' (MFBs) credit and the growth of small and medium-scale businesses' nexus have been identified as one of the areas in the financial economics literature that can quicken the pace of growth and development in an economy such as Nigeria. The microfinance banking sector helps make credit available through intermediation, which involves channeling funds from the surplus to the deficit units of the economy, thereby transforming bank deposits into loans or advances. In Nigeria, however, the inability of the SMEs to adequately access working capital loans to grow and expand their respective businesses through commercial banks stimulated the establishment of microfinance banks to bridge the existing lacuna. (Akingunola *et al.*,

2018). This lack of adequate finance is seen as the major cause of the relative absence of these enterprises in poor economies (Alalade *et al.,* 2013). Consequently, microfinance banks emerged to assuage the SMEs' financial incapability and encourage enterprises' capacity development. Thus, due to the government's inability to adequately assist in poverty alleviation, microfinance's discovery became valuable for the low-income class to access credit and other financial services (Ailemen *et al.,* 2016). Microfinance Banks are responsible for more than half of the economically active population in Nigeria, whom the deposit banks do not bank since most are poor. The study by Dada (2014) observed that governments have implemented numerous national improvement plans and programs to boost productivity and emphasize the growth of small and medium-scale sectors of the economy. To deepen the level of financial inclusion, the Central Bank of Nigeria (CBN) is paying more attention to the performance of the MFBs and their impact on empowering the poor people and SMEs' access to capital (Eigbiremolen & Anaduaka, 2014). According to Syed *et al.* (2018), Microfinance activities usually involve small loans typically for working capital, informal appraisal of borrowers and investments; collateral substitutes, such as group guarantees and compulsory savings, access to repeat and larger loans, based on repayment performance, and streamlined loan disbursement and monitoring. Microfinance has gained universal consensus as an effective tool for alleviating poverty and improving well-being (Ebimobowei *et al.*, 2012). After this, the microfinance objective includes assisting in the development drive of micro, small, and medium enterprises, supporting sustained economic growth, and providing loans to micro-entrepreneurs to invest in their businesses and grow out of poverty (Ailemen *et al.,* 2016; Asor *et al.,* 2016; Alalade *et al*., 2013; Khan, 2020)

Despite Microfinance Banks' importance in enhancing the development of SMEs in Nigeria, Khan (2020) opines that few entrepreneurs patronize these banks. According to this scholar, the motivating factors for this are interest rates and strict borrowing conditions, among others. In the opinion of Alalade *et al.* (2013), finance remains a strategic resource for SME development because investments are needed for new ideas to become marketable products and services. Accordingly, the inability of the SMEs to adequately have access to funding from the MFBs is a major retardation to the planned economic growth. This assertion by Khan (2020) therefore, has generated concern among stakeholders and scholars about the need to assess how much funds available to Microfinance Banks were channeled to the expected target.

Moreover, studies that ascertain how much microfinance has influenced the inclusive growth and development of small-scale businesses, including its effects on poverty alleviation, particularly in advanced and developing economies, are still heavily debated (Mahmoud, 2005; Abiola, 2011; Meisami, 2013). In other words, it remains to be seen to what extent microfinance credit affects the performance of SMEs in Nigeria with special interest in Abia State. Thus, this study on the effects of microfinance credits and the performance of MSMEs in Abia State with specific objectives todetermine the effects of Microfinance Bank products on the performance of SMEs in Abia State, find out the effects of Microfinance bank credits on the profitability of SMEs in Abia State and ascertain the forms of Microfinance Banks credits that contribute more to the performance of SMEs in Abia State.

LITERATURE REVIEW

Concept of Microfinance Bank

The microfinance scheme is a platform aimed at delivering financial services to the active poor and the unbanked to alleviate their standard of living. Wanchoo (2007) defines microfinance as any activity that includes the provision of financial services such as credit, savings, and insurance to low-income individuals who either fall below the nationally defined poverty line or fall just above that, with the goal of creating social value. The creation of social value means making efforts in the direction of poverty alleviation, enhancing well-being chances for the poor by providing capital for micro-enterprises, encouraging the savings culture of the poor so that current problems and future risks could be curtailed. Yunus (1999) explained that microfinance entails the means of access to finance by poor people that allow them to utilize their capacities in favor of lasting development. Ehigiamusoe (2011) also asserted that the use of microfinance does not involve only disbursement and collection of loan repayment and savings; it also refers to a set of flexible organization structures and processes through which provision of essential financial services are offered to low-income earners and small business entrepreneurs continuously. Microfinance is a general term that explains financial services designed for the low-income earners or those who do not have access to banking services. The concept encompasses not only the extension of credit to people experiencing poverty but also the provision of other financial services (Dasgupta, 2006; Nagayya & Rao, 2009). According to
Dasgupta (2006), these financial services mainly comprise deposits, loans, payment services, money

transfers, and insurance to poor and low-income households and their microenterprises. The concept of accessing microloans at acceptable terms to alleviate the economically active poor has been widely accepted since the introduction of microfinance banking in Bangladesh in the mid-1970s (Chew *et al.,* 2016). The seeming popularity of this model among developing countries is predicated on the poverty reduction prospect it offers. The concept of microfinance encompasses banking for the poor and banking with the poor. Thus, these microfinance schemes open a vista of finance for the poor and unbanked, who were denied access to finance from conventional banks as a result of the absence of collateral (Nagayya & Rao, 2009). Microfinance targets the poorest segment of clients. They are self-employed and household-based entrepreneurs. The concept of banking services tailored to the poor is familiar; Savings and credit groups have existed for decades in many parts of the world (Singh & Bhar, 2016). Traditional savings and credit institutions for the active poor have existed for centuries, offering customers who do not have access to conventional banks ' financial services through cooperatives and development finance institutions (Acha, 2012). Traditional savings and credit institutions for the active poor existed centuries ago (Soltane, 2012), providing customers who lack access to conventional banks' financial services through cooperatives and development finance institutions (Soltane, 2012). The goal of these micro-credit institutions for rural finance intervention was generally illustrated in terms of the agricultural sector innovations with objectives to grow business of the rural sector through deploying idle savings, growing investment through credit, and cutting repressive outdated connections, which are compelled by debts (Aghion et al., 2010). The microfinance scheme was established to offer financial services to economically active poor people excluded from accessing financial services from traditional banks, create jobs, develop rural areas, and reduce poverty (Chew et al., 2016). Research has shown that the significance of microfinance is that it allows the poor to have access to financial services that the conventional financial system could not provide to enhance and expand their economic activities, promote the morale of the poor, and assist in boosting economic development on a consistent level (Anku-Tsede, 2014; Chew et al., 2016; Hassan, 2014).

The Concept of SMEs in Nigeria

Nigeria is unarguably one of the largest economies in the Sub-Saharan Africa. Though she relies majorly on oil, her economy is also grown by pockets of corporate organizations covering almost all spheres of activities within the country, ranging from multinational corporations with offices within the country, indigenous companies, and largely small and medium-scale enterprises (SMEs). SMEs are non-subsidiary, independent firms/organizations that employ fewer employees. This number varies across countries. According to the European Union (EU), SMEs are micro, small, and medium-sized enterprises that employ fewer than 250 persons and have an annual turnover of at most 50 million Euros. In Nigeria, the Central Bank of Nigeria's monetary policy circular No. 22 of 1988 defined SMEs as enterprises with an annual turnover not exceeding five hundred thousand naira (N500,000). For clarity, the National Policy on Micro Small and Medium Enterprises (MSMEs) has clearly distinguished enterprises based on employment and Assets. SMEs are organizations that can best be described through their capital, scope, cost of projects, annual turnover, financial strength, and number of employees, amongst other things. Such organizations must and can be registered under any part of the Companies and Allied Matters Act (CAMA) to do business in Nigeria.

Nevertheless, it is usually advised that SMEs register under Part B of the CAMA. The basic requirements to enable an organization to properly do business in Nigeria are enumerated below. The notion of small and medium enterprises (SMEs) was introduced into the development landscape as early as the late 1940s, and the primary aim was to improve trade and industrialization in the present developed nations. (OECD, 2004). The definitions of SME are usually derived in each country, based on the role of SMEs in the economy, policies, and programs designed by particular agencies or institutions empowered to develop SMEs. For instance, a small business in developed countries like Japan, Germany, and the United States of America (USA) may be a medium or large-scale business in a developing economy like Nigeria. Moreover, the definition of SME also varies over time from agencies or developing institutions to another, depending on their policy focus.

The above variation notwithstanding, SME can be defined based on certain criteria, including turnover, number of employees, profit, capital employed, available finance, market share, and relative size within the industry. The definition can be based on either some quantitative or qualitative variables. Quantitative definitions mainly express the size of enterprises, mainly in monetary terms such as turnover, asset value, and profit, and quantitative indexes like the number of employees. For example, the 1975 Companies Act in the United Kingdom stated that an enterprise with

a turnover of less than £ 1.4 million was small, those with a turnover between £1.4 and £5.7million were medium, while those enterprises having a turnover above £5.7 million were large. It also went further to classify the enterprises based on the number of employees - those with fewer than 50 workers being small, between 50 and 250 workers being medium, and those employing above 250 workers were described as being large. Similarly, the European Union (EU) in 1995, defined SME as any enterprise employing less than 250 employees and went further to break down the SME into micro (less than 10 small (from 10 to 49 employees) and medium (between 50 to 249 employees).

In Nigeria, the National Council of Industry, 2003 categorized enterprises based on three criteria:

SIZE	NO OF EMPLOYEE	TOTAL COST, INCLUDING WORKING CAPITAL BUT EXCLUDING LAND
Micro	1 -10	Less than 1million
Small	11 - 35	1million – less than 40million
Medium	36 - 100	40million – less than 200million
Large	101 – above	200Million and Above

However, the asset base criterion is more commonly used in Nigeria. The Central Bank of Nigeria, in its 2005 guideline on the Small and Medium Enterprise Investment Scheme (SMEIS), described SME as any enterprise with a maximum asset base of 200 million naira (excluding land and working capital) with no lower or upper limit of staff.

Concept of Performance

Performance, according to Obiwuru *et al.* (2011), refers to the ability of an organization to achieve such objectives as high profit, quality products, large market share, good financial results, and survival at a pre-determined time using a relevant strategy for action. Consequently, Wang (2010) viewed performance as product accomplishments, results, and achievements in an organization. Williams and Andersons (1991) also defined performance as an employee's achievement level in his/her responsibility and duties assigned in the workplace. Understanding determinant factors of SME performance is an important area of focus in Enterprises (Rosli, 2011). This is because SMEs contribute to employment growth at a higher rate than larger firms. Anastasia (2008) viewed that organizational performance construct can be measured by the product's effectiveness, efficiency, satisfaction, and innovation. According to Apolot (2012), organizational assessments of performance in sales growth, customer satisfaction, and profitability were measured in their businesses. This study, therefore, adapts the definition of
Apollo (2012)

The Concept of Profitability

In the view of Nimalathasan (2009), profitability is defined as "the ability of a given investment to earn a return from its use'. The word profitability is composed of two words: profit and ability. Profitability ratios measure the firm's ability to generate profits and central investment to security analysis, shareholders, and investors. Profitability is the primary measure of the overall success of the enterprise. The word "Profitability" is composed of two words viz. "Profit" and "Ability" to obtain profit from an accounting point of view, total expenses are less than the total revenues for a given period. Based on the concept, profitability may be defined as the ability of the investment to earn a return from its investment. The word ability means the earning power or operating performance of the concern on its investment (Nimalathasan, 2009).

Profitability is the ability to earn profit from all the activities of an enterprise. It indicates how well the management of an enterprise generates earnings by using the resources at its disposal. In other words, the ability to earn a profit, e.g., profitability, is composed of two words: profit and ability. The word profit represents the absolute figure of profit, but an absolute figure alone does not give an exact idea of the adequacy or otherwise of increase or change in performance as shown in the financial statement of the enterprise. The word 'ability' reflects the power of an enterprise to earn profits; it is called earning performance. Earnings are an essential requirement to continue the business. A healthy enterprise has good profitability.

Microfinance Banks and Performance of Small Medium Enterprises

The establishment of microfinance institutions in Nigeria stems from the exclusion of the poor from conventional financial services, which led the government to initiate a broad variety of informal alternative financial services that satisfy the financial needs of low-income earners (Rai, 2016). The financial institutions were designed to provide microcredit to the poor to alleviate poverty by providing microloans to low-income earners (Reeves & Sabharwal, 2013). Microfinance activities

have indeed been considered a concept that allows the poor and low-income earners access to financial services and, hence, the potential ability to improve social status. Globally, the poor are people whose basic earnings are below the minimum wage and whose sources of income are inadequate to finance their essential needs of food, shelter, and clothing (Reeves & Sabharwal, 2013). Today, the role of microfinance in economic development has taken center stage in economic planning and strategy refinement across global economies because of its positive spillover benefits to spurring the functionality of small businesses/enterprises through the provision of microcredit facilities. This is because SMEs have gained prominence in our society because of the role they play in metamorphosing the economy. SMEs in Nigeria are seen as the backbone of all economies and are a key source of economic growth, dynamism, and

flexibility. Small businesses in Nigeria are constrained by many factors, especially a need for more funds to purchase critical inputs that enhance productivity (Mahmoud, 2005). In this regard, credit interventions of microfinance institutions become critical for accelerating growth in domestic output and broadening the welfare contents of the populace. The issuance of a micro-finance policy for Nigeria by the CBN is aimed at expanding the country's financial infrastructure to meet the financial requirements of the poor, low-income groups, and micro-entrepreneurs.

Given the above understanding, the advantage of microfinance stems from the creation of equal opportunities in the business world, as it functions effectively in poverty alleviation. This is because microfinance has been recognized as a financial and non-financial services institution with the ability to improve the growth of small businesses operated by poor people in alleviating poverty (Reeves & Sabharwal, 2013). While studies have analyzed the impact of microfinance on economic growth using data from both developed and developing economies, few studies (Abiola, 2011; Apere, 2016) have explored the effects on economic development. Microfinance institutions should be targeted at economic development because unless all sections of society benefit from faster and more economic growth, the social conditions in such a country can deteriorate and lead to violence and chaos. Successive governments in Nigeria have countlessly initiated programs to provide financial services to the unbanked and the active poor to channel finance to the productive economic units in the low end of the nation’s socio-economic strata.

Moreover, studies that ascertain how much microfinance has influenced inclusive growth and development, including its effects on poverty alleviation, particularly in advanced and developing economies, are still heavily debated (Mahmoud, 2005; Abiola, 2011).

Theoretical Review

The Financial Intermediation Theory

The financial intermediation theory by Gurley and Shaw (1967) explains the role of bank credit in an economy. The theory states that the business of financial intermediation in any modern economy provides a mechanism to draw financial flows from financially exceeding agents to those with a financial need in the economy. This means that microfinance institutions can influence the growth of small and medium-scale businesses in Nigeria by extending credit to the sector. Andabai and Jessie (2019) observed that the role of bank credit to the private sector in stimulating economic growth and development must be balanced. Thus, this is one of the most important sources of financing for entrepreneurs, especially for the development of small and medium-scale businesses in Nigeria. Nzotta (2014) posits that bank credit is one of the important aspects of financial intermediation that provides funds to economic entities that can put them into the most productive investment in an economy. They conclude that credit availability for consumption and investment can raise the level of private sector output and create economic employment opportunities. Hence, microfinance banks are expected to finance any positive net present value project if the investment cost exceeds expected returns. Based on these contributions, there is a justification for anchoring this study on financial intermediation theory.

METHODOLOGY

The study employed both primary and secondary data in achieving its objectives. The population of this study consists of 3565 SMEs in Abia State. The sample size is 360 and was calculated using Taro Yamane's formula. 360 Questionnaires were administered to 360 respondents, and 352 were received back, representing a 97.78% response rate. The research questions were answered using simple statistical tools such as frequency, percentage, standard deviation, and mean, while null hypotheses were tested using OLS regression.

DISCUSSION OF FINDINGS

The study examined Microfinance Bank credits and the performance of Small and Medium Enterprises (SMEs) in Abia State. From the data analysis, in examining the effect of Microfinance Bank products on the performance of SMEs in Abia State, the result indicates that microfinance Bank products have a significant effect sig ($p = 0.000 < 0.05$) on the performance of SMEs in Abia State. Also, the clustered mean was 3.77, which was accepted; this implies that microfinance Bank products affect the performance of SMEs in Abia State. The result conforms with Zhiri (2017), who conducted a study on the impact of microfinance services on the performance of small and medium enterprises in the Zaria metropolis. The study revealed that microfinance services significantly impact the level of entrepreneurship activities of SMEs in the Zaria metropolis. Obadeyi (2015) examined the relationship between microfinance banking and developing small businesses in Nigeria. The results also show that microfinance banks' products significantly impact the performance and growth of small and medium businesses.

The results examining the effect of Microfinance Bank credits on the profitability of SMEs in Abia State using the second research question and hypotheses, which states that Microfinance Bank credits do not have any effect on the profitability of SMEs in Abia State was rejected since sig ($p = 0.000 < 0.05$) is less than the 0.05 alpha, the null hypothesis meaning that Microfinance Bank credits have an effect on the profitability of SMEs in Abia State. Also, the clustered mean was 3.667, which was accepted; this implies that Microfinance Bank credits affect the profitability of SME business in Abia State. This result aligns with the findings of Akingunola et al. (2018), who investigated the impact of microfinance banks on micro and small enterprises in Ogun State, Nigeria. The results also showed a positive relationship between microcredit and business expansion. However, against a finding of Bakare (2019), who investigated the effects of microfinance credit on small and medium business growth in Nigeria from 2006-2014.

The result of the third hypothesis, which states that none of the forms of microfinance Bank credits contribute to the performance of SMEs in Abia State and the clustered mean was 3.76, were accepted ($p = 0.000 < 0.05$), meaning that all of the forms of microfinance Bank credits contribute to the performance of SMEs in Abia State. The coefficient was positive (0.134834). This implies that an increase in Bank credits leads to an increase in Bank credits of SMEs in Abia State, Nigeria. This conforms with many studies, such as Imoughele and Ismaila (2014), which examined the impact of commercial bank credit on the growth of small and medium-scale enterprises; the result shows microfinance banks' contribution to goal achievement. Thus, accessing finance has been identified as a key element for SMEs to succeed in their drive to build productive capacity, compete, create jobs, and contribute to poverty alleviation in developing countries.

CONCLUSION AND RECOMMENDATION

Access to finance and credit plays a significant role in sustaining livelihoods and developing microenterprises. The formal financial institutions view these enterprises as risky and unprofitable and are, therefore, hesitant to provide such credit to them. Microfinance banks' credit and the growth of small and medium-scale businesses' nexus have been identified as one of the areas in the financial economics literature that can quicken the pace of growth and development in an economy such as Nigeria. The study concludes that Microfinance Bank credits significantly and positively affect the performance of Small and Medium Enterprises (SMEs) in Umuahia, Abia State. This is consistent with the study carried out by Zhiri (2017), Onakoya *et al.* (2013), Andabai and Jessie (2018), Obadeyi (2015)

The study recommends that Microfinance banks create more accessible financial products and services tailored to meet the needs of small and medium enterprises. Microfinance Bank credits should be accessible to SMEs with lower interest rates, longer pay-back times, and flexible terms and conditions. Microfinance banks should improve on their forms of credit and make them accessible with flexible terms and conditions for the SMEs, as well as develop support in the form of credits and advisory services to help the SMEs achieve their profitability.

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CORPORATE ATTRIBUTES AND VOLUNTARY FINANCIAL DISCLOSURE OF LISTED MANUFACTURING FIRMS IN NIGERIA

[1]Ujah, Iheanyichukwu P. [1]Azubuike, J. U. B. and [2] Abdullahi, Sadiq Rabiu
[1]Michael Okpara University of Agriculture Umudike 2Bayero University Kano
Corresponding author: ujahpromise@gmail.com

ABSTRACT

The study evaluated the association between corporate attributes and voluntary financial disclosure of listed manufacturing companies in Nigeria for the period 2014 to 2019. Data were collected from the financial statement of fifty-five (55) listed manufacturing companies in Nigeria. Longitudinal and ex-post factor research design were adopted. Collected data were analyzed via Structural Equation Modeling technique (SEM) using Smart PLS. The results comprehensively revealed that corporate attributes have significant effects on voluntary financial disclosures of listed manufacturing firms in Nigeria. Specifically, the result further revealed that firm size, audit committee size and firm growth have a significant relationship with voluntary financial disclosure while firm age, profitability and leverage have no significant relationship. Also, the result shows that there is a significant relationship between corporate attributes and financial disclosure. The study therefore recommends that government should encourage smaller manufacturing companies by promoting the development of IT in Nigeria. Every organization should be able to afford state-of-the-art IT tools. This will reduce information cost and encourage the disclosure of adequate financial information. Finally, in other to increase the extent of disclosure by manufacturing companies as ascertained in the results, government should pave way for easy access to credit facilities by companies since any credit facility given to companies will increase their disclosure index and stability which will invariably increase investor's confidence.

Keywords: corporate attributes, voluntary disclosure, Structural Equation Modeling.

INTRODUCTION

Globally, there have been many cases of corporate scandals and financial crisis like Waste Management in 1998, Enron in 2001, WorldCom in 2002, Tyco in 2002, HealthSouth in 2003, Freddie Mac in 2003, American Insurance in 2005, Lenman Brothers in 2008, Saytam in 2009, Banco Espirito Santo (BES) in 2014, Toshiba in 2015 and Turing Pharmaceutical in 2015 (Modugu & Eboigbe, 2017). All these have raised serious concerns about corporate reporting globally. Similar scandals in companies such as African Petroleum in 2011, Afribank, Cadbury and Unilever in 2014 were also recorded in Nigeria. The common features of these scandals include suppression of losses, inflation of income, understatement of expenses, wrong classification of transactions, and concealment of vital corporate information.

Corporate attributes refer to firm characteristics or specific features that distinguish one company from another. corporate attributes are numerous, it could be the size, profitability, leverage, industry type, geographical location, nature of the business, corporate governance mechanism and any other feature that distinguish one company from the other. These features normally influence company decisions and information disclosure in the financial report. (Habbash, 2016; Yasser, 2021).

Obviously, corporate stakeholders demand reliable, regular, complete and comparable information for making decisions. To this end, companies publish their annual reports conforming to the provisions of International Financial Reporting Standards (IFRS) and the Companies and Allied Matters Act, 2011 as amended at the end of every accounting period. Conventionally, annual reports contain the chairman's statement, directors' report, reports by auditor, position and income statements, cash flow statement, funds flow statement, notes to accounts and statement of financial position, among others. In recent years, company's annual reports are widening their scope by disclosing additional voluntary information such as economic value added information, inflation accounting, human resource accounting, environmental and social responsibility information. Enhanced disclosure decreases information asymmetry between the stakeholders and managers.

Adequate disclosure depends on the quantum and qualitative characteristics of the information that is disclosed; the form in which the information is depicted; frequency and timeliness of reporting. Today, corporate firms does not confine to more disclosure of mandatory information in the annual reports but they disclose additional information on a voluntary basis to gain competitive advantage in the capital market. The large publicly traded companies have surpassed the minimum requirements set by the regulatory bodies and are setting higher disclosure standards for others to follow (Deepa & Isha, 2020).

The disclosure of vital information in corporate annual reports have attracted considerable attention by researchers in recent years. Despite this concern, most of the available empirical studies which capture most of the corporate attributes were done in advanced economies. Also, available studies have noted that quite a number of companies do not engage in complete disclosure of information as most companies comply with the mandatory disclosure requirements while leaving behind the voluntary disclosure, these cases have increase dearth of investors' confidence particularly in Nigeria.
Voluntary disclosure is an issue which has come into the forefront and attracted much interest in accounting literatures in recent times. What lies behind this interest is the aim to identify the factors which underpin the voluntary disclosure of information by the firms to inform the decision makers about financial information and those who prepare and use this information (Agca & Onder. 2007).
Again, the emergence of International Accounting Standards and International Financial Reporting Standards (IFRS) have posed several issues particularly, rudimentary disclosure issues which generate different reporting styles when compared to the old local standards which makes the need for harmonization eminent. Therefore, this study examines the effect of corporate attributes such as firm size, firm age, firm growth, audit committee size, profitability and leverage on financial disclosure of listed manufacturing companies in Nigeria.

REVIEW OF LITERATURE

Corporate attributes and firm's voluntary disclosure

There are many external and internal factors that potentially influence disclosure practice. Investigating these factors and their relationship with the extent of disclosure not only enhances the understanding of the reasons behind the variation in disclosure, but it may also help policy makers to choose the best measures to mitigate imperfections (Cooke, 1989). Haniffa and Cooke (2002) argued that there are five groups of factors that affect disclosure practice: enforcement mechanisms, capital markets, accounting and regulatory framework, economy, and culture. The association between the disclosure level and specific company characteristics (e.g. company size, leverage, listing status, profitability, ownership structure, audit firm size, industry type, etc.) is investigated by many researchers (Gray *et al.*, 1995; Healy *et al.,* 2001; Cooke, 1989; Wallace *et al.,* 1995; Owusu-Ansah, 1998; Lang *et al.,* 1993; Hossain *et al.* 1994). It is also rather interesting to evaluate the relationship of the level of disclosure with stock liquidity. There is a general prediction that voluntary disclosure decreases the gap of information asymmetries among informed and uninformed investors (Healy et al., 1999). Consequently, investors of companies with higher level of disclosure have more confidence about the fair value of company, and this benefits the company by increasing its liquidity of stocks unrelated to current earnings performance (Healy *et al.,* 1999).
The corporate financial reporting literature suggests that several corporate attributes influence the extent to which listed companies comply with mandatory and voluntary disclosure requirements of the stock exchange on which they are listed (Ahmed & Nicholls, 2017). However, attributes are selected for study if they meet all of the following five conditions. First, the attribute should be likely to associate with mandatory disclosure either on a priori assumption or on theoretical consideration. Second, it should be easily measured for the purpose of statistical analysis. Third, the attribute should be able to facilitate the classification of the sample companies into sub-samples without ambiguity, if it is categorical in nature. Fourth, data should be available on that corporate attribute. Finally, the attribute should be relevant to the socio-economic environment of the country under review.
The selected corporate attributes for the study are: firm size, firm age, firm growth, audit committee size, profitability and leverage. They are discussed hereunder:
Firm Size: Firm size is the most common variable in disclosure literature either in developed or developing countries. The firm size of a certain corporation is considered to be the most statistically significant variable in examining the differences between voluntary reporting practices of firms. Moreover, the previous literature offers evidences that the firm size is positvely related with the extent of voluntary disclosure level (Samaha *et al.,* 2012; Alves *et al.*, 2012; Hajji & Ghazali 2013; Ray 2015; Yusuf *et al.,* 2018; Shamsuddeen *et al.,* 2018; Andreas & Loukia 2019). Size is a major variable that explains and influences the disclosure level. The main reason for which company size is established to be positively linked with disclosure is the 'agency theory' (DeAngelo, 2015).
Listing Age: The level of a firm's disclosure may be influenced by its listing age, i.e. stage of development and growth (Owusu-Ansah, 1998; Aktharuddin, 2005, Modugu & Eboigbe, 2017, Yusuf *et al.*, 2018). Older, well established companies are likely to disclose much more information in their annual reports than younger companies. On one hand, younger firms might also exhibit better reporting quality since they need to compete with older firms to survive. For this study, it is expected that company age is a critical

factor in determining the level of corporate disclosure. On the other hand, older companies with more experience are likely to include more information in their annual reports in order to enhance their reputation and image in the market (Owusu-Ansah, 1998; Akhtaruddin, 2005). Owusu-Ansah (1998) pointed out three factors that may contribute to this phenomenon. Firstly, younger companies may suffer competition, secondly, the cost and the ease of gathering, processing, and disseminating the required information may be a contributory factor, and finally, younger companies may lack a track record on which to rely for public disclosure. Empirical evidence is also mixed in relation to age of the firm and the level of reporting. Owusu-Ansah (1998) have found a positive association between the said variables, whereas, Akhtaruddin (2005), Alsaeed (2006) Hossain (2008), Nandi and Ghosh (2012) found no significant association. This notion is weakly supported by Black *et al*. (2006) and Haque *et al.* (2011), who report a positive, though statistically non-significant association. Owusu-Ansah and Yeho (2005) found company age as the critical factor in explaining the extent of disclosure practices. Al shammari et al. (2007) found that age does not have significant impact on corporate governance disclosure. However, Kabir (2014) finds a negative association between firm age and the level of reporting.

Firm Growth: Prencipe (2004) argued that segment reporting may expose the existence of business opportunities to competitors leading to competitive disadvantage to disclosing company and, as a result the extent of voluntary segment disclosure is found to be negatively correlated to the company's growth rate among firms. In contrast Cerbioni and Perbonetti (2007) posit that high growth firm use disclosures as a viable means for bridging a potential information gap due to higher information asymmetry between managers and investors. Therefore it is expected in this study that managers may tend to disclose more segment information in order to mitigate information asymmetry.

The audit committee size: this is size of the auditing firm which has the responsibility of enhancing internal control procedures, overseeing a firm's financial reporting process, external reporting and the risk management of companies. The audit quality is more reliable when audited by the big four auditing firms (i.e. Deloitte, KPMG, Ernst & Young and PWC) because they have the capacity to acts as a monitoring mechanism and can help to improve the overall quality of information flows between managers and the different interested parties (Nandi & Ghosh 2012). The structure and characteristics of effective audit committee are currently under the spotlight to ensure reliable and high quality financial reporting (Daske & Gebhadrt 2006). Previous research provide evidence of a positive association between the presence of an audit firm and corporate reporting practices (Barako *et al.*, 2006; Rosario and Flora 2005; Ho & Wong 2001).

Profitability: It is another important variable that has a bearing on disclosure by corporate in their annual report. High profits induce management to reveal more information in annual reports to create a good image among varied stakeholders (Ghazali and Weetman, 2006). Managers prefer to communicate good news to stakeholders to justify their compensation packages (Inchausti, 1997 and Albitar, 2015). Unprofitable companies do not disclose much information to conceal their losses (Aljifri *et al.* 2014). Profitability may be measured through net income, profit margin, return on assets, earning growth, dividend growth and return on equity. In the present study, profitability has been determined by the return on asset. Meek *et al*. (1995), Alsaeed (2006), Barako *et al.* (2006), Hashim and Saleh (2007), Rouf (2011), Galani *et al.* (2011), Arif and Tuhin (2013), Aljifri *et al.* (2014), Hasan and Hosain (2015) established a positive relationship among profitability and the disclosure level to the contrary Galani et al. (2011), Arif and Tuhin (2013), Aljifri *et al*. (2014)) found negative association between profitability and disclosure. Profitability is measured in two ways to capture different dimensions of profitability- operational efficiency (by return on turnover) and overall performance (by return on capital employed) of the reporting company.

Leverage: This refers to presence of long term debt in financial structure of a company. High level of leverage leads to high agency cost. So, firms with high leverage disclose more information (Edogiawerie & David, 2016). The yield to maturity and the total interest cost of debt instruments have been used as a proxy of leverage in prior studies. The present paper has used debt equity ratio to measure the leverage. Many of the earlier studies Chow and Wong-Boren (1987), Meek *et al.* (1995), Marston and Robson (1997), Haniffa and Cooke (2002), Hashim and Saleh (2007), Mahajan and Chander (2011), Nandi and Ghosh (2012), Sehar *et al.* (2013) depict negative linkage among the disclosure level and leverage. In contradiction few researchers explored a positive association among leverage and the extent of disclosure (Bhayani (2012), Kolsi (2012) and Hassan and Bello (2013)).

Significance and determinants of Corporate Disclosure

The imperativeness of looking at financial disclosure as a means of demonstrating accountability and transparency is viewed from many perspectives. The economic justification of disclosure which demonstrates accountability and transparency in financial reports of firms is seen primarily from an

implicit assumption in accounting and corporate management that investors based their investment decisions on the information released from annual accounts of firms. For example, Inchausti (1997) argued that all firms operate in competitive markets and stakeholders such as investors (potential or existing) and other individuals that deal with the company want to know if their investments will increase or decrease their worth. Again, for government companies, both mandatory and voluntary disclosure is key for a variety of reasons, such as, the overriding consideration is not wealth-maximization, but accountability, transparency, economic stabilization, income distribution, value for money, effectiveness and efficiency in which government companies transact businesses and a host of other objectives are very important. This peculiar attributes of this group of companies, place government companies in a unique situation about disclosure. Three, disclosure is also useful to all users of financial statements. Prior literatures have listed common accounting disclosures that will aid the understanding of the information contains in financial statements. These include statements on how the company has interpreted and applied Generally Accepted Accounting Practice (GAAP) in accounting policies (Vitez, 2013).

Concept of voluntary disclosures

Voluntary Disclosure is the free choice of management company for decision making by the users of annual reports. Every public company is required to prepare financial statements audited by a public accountant as a form of accountability, especially to the owners of capital. Securities and Exchange Commission requires the elements that must be disclosed in the financial statements of public companies in Nigeria. Disclosure is the communication of economic information, whether financial or non-financial, quantitative or otherwise concerning a company's financial position and performance (Sebastian & Ray, 2017). Voluntary disclosure is, thus, operationalized as the number of non-mandated applicable information items that a listed company discloses, and the degree of intensity by which it discloses those items in its annual report. In recent years, however, both theorists and practitioners have begun to recognize the inherent shortcomings of traditional reporting and have developed models for additional voluntary disclosure. The Value Reporting framework developed by PricewaterhouseCoopers (Amernic & Maiocco, 1981). These business reporting frameworks provide information supplementary to the traditional financial report and may help investors to better identify value-driving activities. Although the developments in the field are emerging on a rather piecemeal basis, voluntary reporting is now, nonetheless, gradually being accepted as part of the company's official external reporting (Bradbury, 1992). The voluntary disclosure has its sources in the past of the business development, when, as a result of the fact that owners have delegated to the managers the leading function of the enterprises, the need for voluntary disclosure appears as a consequence of the information asymmetry between the two parties: managers are better informed about the business than its owners. The development the capital market has led to a more and more emphasized manifestation of' the voluntary disclosure. The voluntary disclosure regards information made public through the firm's free choice.

Although the voluntary disclosure represents the reporting outside the financial statements, which is not explicitly ruled through norms or laws, it is admitted that many of these voluntary disclosures" are made in order to be in agreement with the requests of the stock-exchange commission regarding: the companies presentation, analysis and management presentations regarding risk, opportunities and the results obtained or provisioned., therefore, in order to obtain capital and moreover to attract investors, companies often voluntarily disclose corporate information seen in the absence of regulation Bujaki and McConomy (2002).

Theoretical Framework

Different theories have been used to interpret the fluctuations in the corporate attributes and disclosure practices of firms. This has generated a big debate in the literature about which model that explains best the relationship between corporate attributes and the disclosure practices of firms (Sabastian & Ray, 2017).

The debate has proved that there is no single theory that provides an adequate explanation of the relationship between various corporate attributes and accounting disclosures, because each theory based on specific assumptions, explains disclosure through a particular perspective. For example, Jensen and Meckling (1976) used agency theory to explain the association between corporate attributes and disclosure. American Accounting Association (AAA) (1993), Gorman and Wallance (1995) and Bartol et al (1995) used contingency theory to explain the effect of environmental factors on accounting standards in disclosure practices of firms. Other researches use other theories like stakeholder theory, resource dependence theory, stewardship theory and a host of others (Galani *et al.*, 2011, Alsaeed, 2006).

Three fundamental theories have been adopted in this study to explain the relationship between corporate attributes and extent of disclosure. They are the agency, signaling and Positive Accounting theories.

Agency Theory

The agency theory by Alchian and Demsetz (1972) was further developed by Jensen and Meckling (1976) is based on the principal agent relationships. The separation of ownership and management of companies gives the environment for the functioning of the agency theory.

Agency theory provides a framework that relates company attributes and management and employee attitude towards financial disclosures. Agency theory argues that senior management was likely to manipulate the information in the financial statements in its own favour by selecting accounting procedures that maximize their own utility (Jensing & Mechling, 1976).

Agency theory resolves agency problems through monitoring management activities, controlling self-centered behaviors of management, increasing and examining the financial reporting process (Habbash, 2016). it is believed that high level of accountability through disclosure reduce the agency conflict of management and owners and it is used as a monitoring mechanisms (Jensen & Meckling, 1976).

Signaling Theory

According to signaling theory, signals are a reaction to information asymmetries between companies and stakeholders, and companies reduce the asymmetry by providing information (Spence, 1973). Companies that are characterized by increased disclosure signal to their stakeholders that they are trustworthy and are less likely to be encumbered by regulatory oversight. By using disclosure to serve these purposes, managers of better performing companies can distinguish themselves from their peers. According to this theory therefore, increase in voluntary disclosure increase public loyalty and this may lead to increase in demand of a firms shares leading to increase in financial performance. This theory posits that firms with good performance tend to make voluntary disclosures more readily, as doing so is regarded as an easy means of distinguishing themselves from others in the marketplace.

Firms disclosures of information fall somewhere between no disclosure and full disclosure, depending on their motivations. All firms, at least partially, disclose information about their business prospects in order to signal they either are or have good investment opportunities (Bhattacharya and Ritter 1983). Managers may wish to reduce information asymmetry existing in the market regarding the firm's performance. For example, voluntary disclosures may serve as "signals" if they reflect information about unobservable attributes of a firm's decision (Morris 1989). Under such a scenario, managers of higher quality firms with private information can distinguish themselves from lower quality firms via voluntary disclosures. At the same time, managers of an underperforming firm may signal the firm is taking steps to improve performance by disclosing a decision related to outsourcing.

The Positive Accounting Theory (PAT)

Positive Accounting Theory (PAT) came into being in the mid-1960s. It stemmed from the works of the popular theorist Fama in the 1960s, particularly the work that related to the Efficient Markets Hypothesis (Deagan, 2004). Positive Accounting theory was popularized with the works of Gordan (1964). He argued that senior management was likely to manipulate the information in the financial statements in its own favour by selecting accounting procedures that maximize their own utility. Afterwards several attempts had been made to provide a positive theory of financial reporting (Jenson & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1978). They tried to explain why accountants do what they do and explained its effect on people and resource allocation.

'Positive' Agency theory is concerned with resolving the problems that can occur in agency relationships (Jensen & Meckling, 1976). They define agency relationship as a contract under which the owners of the organization (principal(s)) engage the manager (agent) to perform some service on their behalf. Under this arrangement, the owners delegate some decision making authority to the manager. It is presumed that both parties are utility maximizers, with varying philosophies and this could result in divergent and misaligned interest between them. Owners' would want to maximize net present value of firm while the managers would want to maximize utility, of which income is part. Most cases, the agent will not always act in the best interests of the principal. The agents could also hide information for selfish purpose by non-disclosure of important facts about the organization (Barako *et al.*, 2006). Owners face moral dilemmas because most times they cannot ascertain or evaluate the decision made by their agents (Barako, 2007). This conflict of interest results to "agency problem" a.k.a. "principal-agent problem" whose resolution incurs agency costs (Al-Shammari, 2005).

Jenson and Meckling (1976) and Jenson (1983) acknowledged that agency problem is common to all organizations and it exists in all corporative efforts at each level of management in firms. This includes public organizations, private organizations, not-for-profit organizations such as schools, hospitals, and foundations, and even governmental enterprises and bodies such as the federal, state and local government. Jenson and Meckling (1976) focused exclusively on the positive aspects of the agency

relationship as it applies to corporations. That is how to structure the contractual relation between the owner and manager to induce the manager to make choices which will maximize the owner's welfare, given that uncertainty and imperfect monitoring exist.

Agency, Signaling and, Positive Accounting theories are used in this study to develop a strong theoretical base for conceptualizing, identifying and explaining the relationship between

Empirical Review

Accounting researchers have investigated relationships between corporate characteristics otherwise known as corporate attributes and disclosures in corporate annual reports of firms since 1960s. Early works on this subject was pioneered by Cerf (as cited in Fremgen, 1964) and afterwards, many studies have examined the quality of financial disclosures in various contexts. Research setting varies from developed to developing countries. Studies in developed countries include: United States (Singhvi & Desai, 1971; Buzby, 1975; Stanga, 1976, Street and Bryant, 2000); New Zealand (Mc Nally *et al.,* 1982; Sweden (Cooke, 1989); Canada (Bujaki & McConomy, 2002); Spain (Wallace *et al.,* 1994); France (Depoers 2000); Japan (Cooke, 1992); Germany (Glaum & Street, 2003); New Zealand (Owusu-Ansah & Yeao, 2005); United Kingdom (Iatridis, 2008; Camfferman & Cooke, 2002).

While studies in developing countries include India (Singhvi,1968; Ahmed, 2005), Mexico (Chow & Wong-Boren, 1987), Nigeria (Wallace, 1988; Ofoegbu & Okoye, 2006; Kabir 2014; Ojeka, Mukoro & Kanu 2015; Sebatian & Ray 2015; Edogiawerie & David, 2016; Olubakunola, Uwuigbe, Adeyemo & Oluwatobilola 2016, Kennedy & Sharlywest 2017; Yusuf *et al.*, 2018); Zimbabwe (Owusu-Ansah, 1998); Bahrain (Joshi & Ramadhan, 2002); Jordan (Naser *et al.,* 2002); Saudi (Naser & Nuseibeh, 2003) Kenya (Barako, 2007) and Bangladesh (Akhtaruddin, 2005; Waresul, Karim & Ahmed, 2006).

The researchers examined corporate attributes that are used as predictors of the quality of disclosure. This ranges from two corporate attributes (Buzby, 1975) to eleven corporate attributes (Mc Nally *et al*, 1982). The most popular characteristics are corporate size, profitability, liquidity, gearing, audit size, listing status, multinational parent, age, and ownership structure. These attributes are basically used by the underlisted mentioned authors notwithstanding the discrepancies of usage (Ojeka, Mukoro & Kanu 2015; Sebatian & Ray 2015; Edogiawerie & David 2016; Olubakunola *et al.*, 2016, Kennedy & Sharlywest, 2017; Yusuf *et al.*, 2018, Umoren, 2009, Adelopo, 2011; Giannarakis, 2014; DiGiuli & Kostovetsky, 2014; Ducassy & Montandrau, 2015; Jian & Lee, 2015; Ballesteros *et al.*, 2015; Ibrahim & Hanefah, 2016; Rahman & Ku Ismail, 2016; Habbash, 2016; Deepa & Isha, 2017) . The value of disclosure in corporate annual reports and accounts has been represented in theliterature by several constructs: adequacy (Buzby, 1975, Owusu-Ansah, 1998, Mukoro & Kanu 2015; Sebatian & Ray 2015; Edogiawerie & David 2016), comprehensiveness (Wallace & Naser, 1995, Barrett, 1976, Kennedy & Sharlywest 2017; Yusuf, Adebayo & Yusuf 2018), informativeness (Alford, Jones, Leftwich & Zmijewski, 1993), and timeliness (Courtis, 1976). Each construct suggests that the value of disclosure can be measured by an index representing the dependent variable raging from mandatory, voluntary and total disclosures. Some studies used weighted disclosure indexes while some others use unweighted disclosure indexes. Those that use indexes are of two strands, weighted (either subjectively by the researcher(s) alone or by the researcher(s) using weights elicited from surveys of users' perceptions), while some others are unweighted. All the studies, except for Imhoff (1992) and Lang and Lundholm (1993), use a researcher created dependent variable. Both Imhoff and Lang and Lundholm used disclosure indexes created by analysts. Chow and Wong-Boren, (1987) have provided some proofs that there may be no significant difference between weighted and unweighted disclosure indexes. In addition, weights neither affect real economic consequences on the subjects whose opinions are pooled (Chow & Wong-Boren, 1987) nor do they reflect stable perceptions on similar information. The information items forming the basis of the index of disclosure are either voluntary or mandatory disclosures. The mandatory disclosures are basically international standards. These items vary from a minimum of 24 (Chow & Wong-Boren, 1987) to a maximum of 214 (Owusu,, 1998). Some of these disclosure indexes are items across subjects (Chow & Wong-Boren, (1987), over time (Dhaliwal, 1980) and from similar subjects across countries (Firer & Meth, 1986).

While earlier studies use the matched-pair statistical procedures to test the difference between mean disclosure indexes of two or more groups of sample firms (e.g., Singhvi & Desai, 1971; Buzby, 1975), Studies from the 1980s, beginning with Chow and Wong-Boren (1987), use the multiple regression procedure and the sophistication and rigour of analysis of the regression methodology are improving with time. For example, Cooke (1989) and Imhoff (1992) use different rigorous dummy variable manipulation procedures within a stepwise multiple (OLS) regression while Lang and Lundholm (1993) introduce the use of rank (OLS) regression to cater for the monotonic behaviour of disclosure indexes following a change

in some independent variables. Overall, the findings regarding the compliance level of companies and the relationship between the level of disclosure and various corporate attributes are mixed.

METHODOLOGY

This study made use of longitudinal and ex-post facto research design. Longitudinal design track the sample at different points in time while ex-post facto is a systematic empirical enquiry in which the scientist does not have direct control of independent variables because they already exist. A content analysis of the annual reports of a cross sectional sample of listed companies for six years ranging from 2014 - 2019 was conducted. Each annual report was carefully scrutinized and scored as a disclosure index based on the researcher-developed checklist. The disclosure index method was seen by researchers in time past (Singhvi, 1968; Singhvi & Desai, 1971) as an adequate model for financial disclosure and have been used over time.

The population consists of all the listed manufacturing companies at the first-tier market of the Nigerian Stock Exchange (NSE) within the period ranging from 2014 - 2019. The entire 55 listed manufacturing companies constituted the population size. The justification for the selected period for the study is based on the fact that most companies in Nigeria first complied with IFRS in the reporting of their financial statement from year 2014.

For the purpose of the content analysis undertaken in this study, secondary data were utilised. The secondary sources of data consist of annual audited reports and fact books.

1.) Instrument of data collection

The instrument employed for collection of the secondary data was a researcher designed checklist.

2.) The disclosure checklist

There are different methods that can be employed to construct disclosure checklist in order to measure the information contents of annual reports. Methods vary considerably among different studies. In some studies an exhaustive list of financial and/or non-financial voluntary information items are quantified (Chau & Gray, 2002; Chow & Wong-Boren, 1987; Meek et al, 1995; Ferguson, Lam & Lee, 2002; Haniffa & Cooke, 2002; Barako, 2007), Al-Shammari, 2005), whilst others consider both voluntary and mandatory items (Cooke, 1992; Cooke, 1993; Inchausti, 1997). There are also differences in the number of information items in the checklist. There is no agreed theory on the number and the selection of the items to include in a disclosure checklist (Wallace et al., 1994). This study takes a comprehensive approach by focusing on voluntary items, using the researcher-constructed checklist. The disclosure checklist is designed in line with the disclosure requirements of the IASs/IFRSs and other relevant voluntary disclosure.

Reliability and validity

As part of the measurement model evaluation, six measurable variables as presented in Table 1 (FSIZE, FAGE, FG, ACS, PAT, and LEV) were use for the analysis because their factor loadings were greater than 0.60 bench mark (Gefen & Straub, 2005). To test for the reliability of the constructs, the study made used of Cronbach's Alpha and Composite Reliability (CR). All the composite reliabilities were greater than the recommended value of 0.70 (Wasko & Faraj, 2005). Cronbach's Alpha of each construct exceeded the 0.70 bench mark (Sekaran & Bougie, 2013). Convergent validity was acceptable because the Average Variance Extracted (AVE) was above the recommended 0.50. The results for reliability and validity is presented in Table 2. Discriminant validity was assessed using the Fornell Larcker Criterion. The results revealed that the square root of AVE for the construct was higher than the inter-construct correlation. Discriminant validity was further assessed using the Heterotrait-Monotrait (HTMT) ratio (Henseler et al., 2015) with values below the bench mark of 0.90. Hence, discriminant validity is established (See Table 3 and Table 3.4).

Table 1: Factor Analysis

Measurement Model	Factor Loading
Firm size (FSIZE)	0.892
Firm Age (FAGE)	0.893
Firm growth (FG)	0.861
Audit committee size (ACS)	0.892
Profitability (PAT)	0.850
Leverage (LEV)	0.795
Voluntary Disclosure (VDIS)	0.954

Source: Researcher's compilation

Table 2: Construct Reliability and Convergent validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CA	0.745	0.745	0.887	0.797
VDIS	0.909	0.913	0.956	0.916

Source: Researcher's compilation

Table 3: Discriminant validity - Fornell-Larcker Criterion

	CA	VDIS
CA	0.893	
VDIS	0.139	0.957

Source: Researcher's compilation

Table 4: Discriminant validity: Heterotrait-Monotrait-Ratio (HTMT)

	CA	FVDIS
CA		
VDIS	0.168	

Source: Researcher's compilation

Model specification

The structural equation modeling (SEM) was employed in this study. The SEM captured both the measurement model and the structure model.

Measurement model

$\mathbf{VDIS_{it}} = B_0 + B_1LogFSIZE_{it} + B_2LogFAGE_{it} + B_3LogFG_{it} + B_4ACS_{it} + B_5LogPAT_{it} + B_6LogLEV_{it} + u$ ------ **(1)**

Structure model

$\mathbf{FINDIS = B_0 + B_1}CA + u$ ------- **(2)**

In the measurement model**, FSIZE** stands for Firm size; **FAGE** stands for Firm age; **FG** stands for Firm growth; **ACS** stands for Audit committee size; **PAT** stands for Profit after tax; **LEV** stands for Leverage; **VDIS** stands for Voluntary disclosure.

While in the structure model, CA stands for Corporate Attributes and FINDIS stands for Financial Disclosure.

Table 5: Operationalisation of variables

Structure Model	Measurement Model	Proxy	Code	Expected signs
	Independent Variables			
Corporate Attributes	Firm Size	Log Total assets	FSIZE	+
	Firm Age	Age is the number of years since it became listed at the NSE to December 2019.	AGE	-
	Firm Growth	Total sales	FG	+
	Audit Committee Size	Audit type (1 for Big 4; 0 for non-big 4)	ACS	+
	Profitability	Return on equity i.e. PBTMI/Equity	PRO	+
	Leverage	Total liability to equity	LEV	+
	Dependent Variables			
Financial Disclosure	Voluntary Disclosure Index	The disclosure score of voluntary disclosures.	VDIS	

Source: Researcher's compilation

Data Analysis Techniques

The data for the dependent and independent variables were captured from the annual audited financial statements and collated with the aid of Microsoft Excel 2010. The gathered data were scrutinized and analyzed by employing structural equation modeling using Smart PLS version 3.3.3. Univariate, bivariate and multivariate analyses were employed in exploring the secondary data. The univariate statistics of mean, median, standard deviation, minimum, and maximum were used to describe the patterns of data.

Decision Rule: if the computed t-values is greater than the critical value of 1.96 or 0.05 level of significance, reject the null hypothesis and accept the alternatives, vice versa.

RESULTS AND DISCUSSIONS

Data Analysis

The descriptive statistics is reported in Table 6 The mean of the voluntary disclosure (VDIS) shows an increased mean value of 0.661 with minimum and maximum at 0.20 and 1.70 respectively. This result shows that reasonable number of companies voluntarily disclosed information, despite the fact that they are not mandatory. For the independent variables, firm size ranges from 4.836 to 9.288 with a mean of 7.177. Firm age also ranges from 8 years to 96 years with a mean of 45 years. Audit committee size ranges from 1 to six. These results shows that larger and older companies discloses more information especially those with more audit committee members. Profit margin ranges from -0.36 to 5.96 with mean value of 0.113 and leverages have a mean of 5.847 ranges from -0.14 to 57.13.

Table 6: Descriptive statistics

	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
LOGFS	7.177	7.144	4.836	9.288	0.922	-0.591	0.029
FAGE	44.989	46	8	96	18.165	-0.185	0.094
LOGFG	6.151	6.232	3.507	8.618	1.087	-0.722	-0.131
ACS	4.812	5	1	6	1.242	1.953	-1.291
LOGPROF	0.113	0.05	-0.36	5.96	0.377	206.833	13.404
LOGLEV	5.847	3.94	-0.14	57.13	8.041	14.188	3.338
VDIS	0.661	0.7	0.2	1.7	0.157	15.184	2.12

Source: Researcher's compilations

Table 7: Correlation analysis

	LOGFS	FAGE	LOGFG	ACS	LOGPROF	LOGLEV	VDIS	
LOGFS	1							
FAGE	-0.02	1						
LOGFG	0.813	-0.092	1					
ACS	-0.009	-0.109	-0.051	1				
LOGPROF	0.076	0.077	0.048	0.034	1			
LOGLEV	0.155	0.009	0.142	-0.031	0.089	1		
VDIS	0.104	0.124	0.1	0.095	0.002	0.062	0.084	1

Source: Researcher's compilations

Table 7 shows the correlation analysis with Pearson correlation coefficient between all pairs of variables and the bottom half containing two-tail significance of these coefficients. Checking the pattern of relationships, it is observed that the variables correlate fairly well but not perfectly. There is no correlation coefficient particularly large (greater than 0.9) and there is no significant value greater than 0.05. Hence there is no problem of singularity of data.

Table 8: Multicollinearity

	VIF
ACS	1.023
FAGE	1.04
LOGFG	3.035
LOGFS	3.018
LOGLEV	1.033
LOGPROF	1.021

Source: Researcher's compilations

To ensure multicollinearity will not pose a problem, the variance inflation factor is checked. It is seen to be greater than the necessary value of 5%, this gives the confidence needed to proceed with the factor analysis.

Table 9: Path coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
CA -> VDIS	0.406	0.419	0.049	8.267	0.000

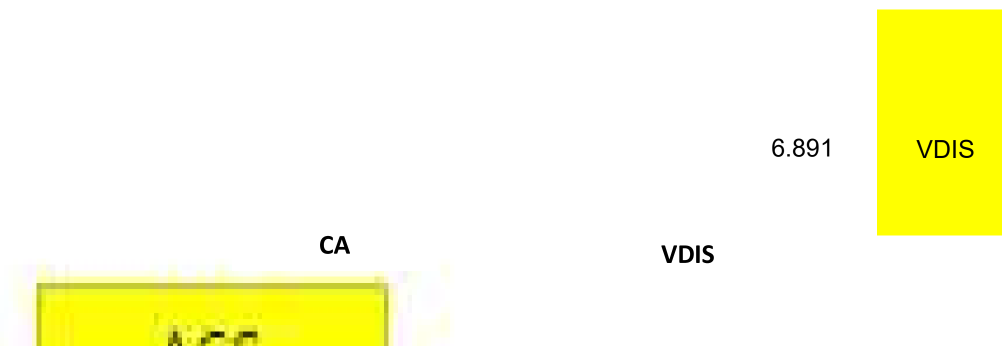

Fig 4.1: Analytical results

Source: Researcher's compilations

Test of hypotheses

Hypothesis 1

H_o: There is no significant association between firm size, firm age, firm growth, audit committee size, profitability, leverage, and voluntary disclosure.

H_1: There is a significant association between firm size, firm age, firm growth, audit committee size, profitability, leverage, and voluntary disclosure.

Figure 1 shows that the measurable variables of accounting attributes are statistically significant. H_o is rejected and H_1 is retained. This means that there is a significant effect between firm size, firm age, firm growth, audit committee size, profitability, leverage, and voluntary disclosure.

Hypothesis 4

H_o: There is no significant effect between corporate attributes and financial disclosure.

H_1: There is a significant association between corporate attributes and financial disclosure.

Table 9 shows structural outcome between accounting attributes and financial disclosure. The result revealed that there is a significant association between accounting attributes and financial disclosure.

Discussion of findings

Based on the analysis and results, the study revealed that firm size is the most consistently reported significant corporate attribute in previous empirical studies (Street & Bryant, 2000; Meek et al, 1995). According to Watts and Zimmerman (1990), larger companies are likely to show more information in order to improve the confidence of stakeholders and to reduce political costs. They argue that in order to curb political interference and the associated costs, large organizations will attempt to disclose more information to somehow influence those involved in the political process. Generally, large firms disclose more information than smaller ones (Meek *et al*, 1995).

Profitable organizations will want to distinguish themselves by disclosing more information so as to enable them obtain capital on the best available terms (Meek *et al*, 1995). Whereas non-profitable firms may disclose less information in order to cover up losses and declining profits (Singhvi & Desai, 1971). Corporate managers are usually reluctant to give detailed information about a non-profitable outlet or product, hence they might decide to disclose only a lump profit attributable to the whole company.

Inchausti (1997) employing signaling theory, states that due to better performance of companies, management is more likely to disclose detailed information to the public than management with poor performance in order to avoid undervaluation of company's shares.

According to Iatridis (2008) firms that provide extensive accounting disclosures tend to use more debt than equity to finance their operations. It appears, therefore, that firms are inclined to disclose information about sensitive accounting issues, such as gearing and risk profile in order to reassure investors and lenders that abide with the disclosure practices as enumerated by the accounting regulation. Provision of accounting disclosures reduces overall level of risk and allows for fund raising in the debts market. Jensen and Meckling (1976) admit that agency costs are higher for companies with more debt in their capital structure and disclosures are expected to increase with leverage. Myers (1977) as cited in Ahmed (2004) states that firms with high debt tend to disclose more information to assure creditors that shareholders and management are less likely to bypass their agreement rights.

The older, well-established companies with more experience are likely to include more information in their annual reports in order to enhance their reputation and image in the market (Akhtaruddin, 2005). Owusu-Ansah (1998) argues that newly-established companies may suffer competitive disadvantage if they disclose certain information items such as product development, which can be used to their detriment by the other competitors. In other words they reserve information in order not to suffer from competitive disadvantage. Contrary to this opinion, Haniffa and Cooke (2002) believe that younger companies disclose more information to boost investors' confidence and reduce skepticism.

Although company management is primarily responsible for preparing the financial report, the audit committee size play a major role in the disclosure policies and practices of their clients (Ahmed, 2004). Jenson and Meckling (1976) argue that auditing is a way of reducing agency costs. Also, the more the audit members, the better in terms of knowledge of local and international standards and the costs of implementing the standards will be lower (Lopes & Rodrigues, 2007) .

Firm Growth is found to be significantly associated with disclosure compliance, suggesting that the growth of manufacturing companies depend more strongly on disclosures requirement in Nigeria. The positive and significant association between firms growth and disclosures corroborates with the works of Cerbioni and Perbonetti (2007) which states that high growth firm use disclosures as a viable means for bridging a potential information gap due to higher information asymmetry between managers and investors. Therefore it is expected in this study that managers may tend to disclose more segment information in order to mitigate information asymmetry.

The company size is found to be significantly associated with disclosure compliance, suggesting that large manufacturing companies comply more strongly with accounting standard disclosure requirements in Nigeria. The positive and significant association between company size and disclosure is consistent with prior findings (see, Wallace *et al.,* 1994; Ali *et al.*, 2004; Al-Shammari, 2005 and Barako, 2007). However, the result contradicts Glaum and Street (2003), who find a negative association that is not significantly related to disclosure. On the positive, it can be argued that since large companies usually operate over wide geographical area and deal with several branches and multiple products, they are likely to have a well-built information system that can enable them track all necessary and essential accounting information for internal and external purposes. This will enable them disclose more financial information than their smaller counterparts.

Profitability is not found to be significant. This indicates that profitability has no impact on disclosure compliance. This result contradicts the prior empirical studies (see e.g. Owusu-Ansah, 1998; Ali *et al.*, 2004) and signaling theory which assert that companies use financial statement as a signaling tool to express their expectations and intentions. According to Singhvi and Desai (1971), the corporation may disclose more information when its profitability is above industry average in order to inform the shareholders and other stakeholders about the corporation's strong position to survive. Contrary to this, profitability of Nigerian listed manufacturing companies does not depict disclosure. Results suggest that informed expert managers in Nigeria, whose compensation is likely linked to the profit of the business, have an incentive to inflate the reported earnings. That is probably why profitability does not have any bearing with either mandatory or voluntary disclosure.

Leverage is not statistically associated with the financial disclosure level. The non significance of this result is related to the works of Chau and Gray (2002) and Ali et al (2004). Contrary to this, leverage was found to be significance in the works of Prencipe (2004) and Al-Shammari (2005). The result contradicts agency theory in which Jenson and Meckling (1976), propound that agency costs are higher for companies with more debt and disclosures are expected to increase with leverage.

The results reveal that the firm age is not a significant variable for voluntary disclosures. This finding is in congruence with the findings of Glaum and Street (2003) for voluntary disclosures. This is not in line with the findings of OwusuAnsah (1998) and Prencipe (2004). The result confirms that there is no significant relationship between company listing age and voluntary disclosures.
In agreement with prior studies by Glaum and Street (2003) and Barako (2007) a positive and significant association between audit committee size and financial disclosure is recognised. It has been found that financial statements audited carry more information than those not audited.

CONCLUSION AND RECOMMENDATIONS

The relationship between corporate attributes and voluntary disclosure have been examined by prior studies, especially as its relates to measurement models, in this study, we moved a step further to examine not only the measurement model which captures the individual relationships, but the structural model outlook which captures the combined effect of corporate attributes on voluntary disclosures. Furthermore, we disaggregated corporate attributes into firm size, firm age, firm growth, audit committee size, profitability, and leverage. This was to allow for the determination of the association between corporate attributes and voluntary disclosure variant of manufacturing companies. Based on the findings of the study, the following recommendations are stated:

i. The government should encourage smaller manufacturing companies by promoting the development of IT in Nigeria. Every organization should be able to afford state-of-the-art IT tools. This will reduce information cost and encourage the disclosure of adequate financial information.
ii. In other to increase the extent of disclosure by manufacturing companies as ascertained in the results, government should pave way for easy access to credit facilities by companies since any credit facility given to companies will increase their disclosure level and stability which will invariably increase investor's confidence.
iii. Finally, managers should take all the necessary measures to ensure that all voluntary information items are adequately disclosed in the annual report in order to avoid penalties and therefore, obtain benefits for their company (i.e. lower cost of capital, high stock liquidity, etc).

Contribution to knowledge

In most reviewed related literature like Ducassy and Montandrau (2015); Jian and Lee (2015); Ballesteros, Ariza and Sanchez (2015); Ibrahim and Hanefah (2016); Abd. Rahman and Ku Ismail (2016); Habbash (2016); Zhang *et al.* (2016); Huang and Zhao (2016); Said *et al.,* (2017); Akamfe, *et al.* (2017); Sadou *et al*. (2017) and Yasser *et al.,* (2017), Shamsuddeen and Muhammad (2018), Yusuk *et al.* (2018), only measurement model was used to capture the relationship between corporate attributes and voluntary disclosure only. In this work, extra mile was reached through the use of Structural Equation Model which captured both measurement model and structural model with diversified results thereby ascertaining both individual and cumulative effects of the variables used. Again, this work forms base and contribution to further research in the area of corporate attributes and financial disclosures especially as regards the methodology used which is basically new in this area of study.

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CONSUMER PREFERENCE AND SOFT DRINKS INNOVATION NEXUS: A PUSH FOR ADOPTION TO GROW LOCAL AFRICAN DRINKS BUSINESS

[1]Onyemachi, Okechukwu N. D. and [2]Nnabuko, Justitia O.
[1]Michael Okpara University of Agriculture Umudike
[2]University of Nigeria Enugu Campus

ABSTRACT

Soft drink, a water-based flavoured, sweetener and/or carbonated drink, have become a key part of most Nigerians' lifestyles. The value of soft drink sales through retail outlets increased to $33.2 billion in 2022, the highest in at least eight years, from $21 billion in 2021. This growth can be linked to consumer preference for this type of drink. The major aim of this study was to examine the influence of soft drink product innovations on consumer preference in Abia state. The study aimed also at pushing for the adoption of the findings in order to grow the local African drinks business. Descriptive research design was adopted. Multistage sampling was used. Abia state was segmented into three senatorial zones. Two Local Government Areas were selected from each of the senatorial zones. All the selected LGAs were issued with 35 copies of questionnaire each. The study found that soft drink product packaging, uniqueness, quality and features were the significant drivers of consumer preference. The study recommended that players within the soft drink market should use these significant production innovation drivers to fine tune consumer preference in favour of their brands. The study went further to recommend that marketers of local African drinks like Zobo, Tiger Nut, Kunu, Adoyo, Fura da Nono and others should adopt innovative packaging, uniqueness, quality and features to swing consumer preference in its favour in order to grow this endogenous African business sector.

Keywords: product innovation, consumer preference, soft drinks, local African drinks

INTRODUCTION

Soft drink, a water-based flavoured, sweetener and/or carbonated drink, have become a key part of most Nigerians' lifestyles. The value of soft drink sales through retail outlets increased to $33.2 billion in 2022, the highest in at least eight years, from $21 billion in 2021. This growth can be linked to consumer preference for this type of drink. Consumers' preference for brands often results in sales and when the sales are sustained they translate to growth. The local African drinks has been around for a very long time but has remained untapped commercially like its counterparts. The absence of such study in Abia state propelled this study. The main objective of the study was to examine the nexus between soft drinks innovation and consumer preference in Abia state. The study went further to recommend the adoption of these findings in the local African drinks business in order advance this sector.

REVIEW OF LITERATURE

Consumer Preference

Consumer preferences for brands or products are the judgements and evaluations consumers make about the products and services presented to them based on certain factors. It can be explained as expectations, likes, dislikes, motivations and inclinations that drive a customer to purchase specific products. A customer's inclinations are what drive them to make a particular choice from among competing items. Consumers' preferences for products or brands arise from the combination of many different factors. Some factors come from features of the product itself while others are attributes of consumers themselves (Venkatraman *et al.*, 2012; Isik & Yasar, 2015; Jin & Weber, 2013).

Soft Drinks

Soft drink is any class of non-alcoholic beverages that is mostly but not certainly carbonated, normally containing a natural or artificial sweetening agent, edible acids, natural or artificial flavours, and sometimes juice. Natural flavours are derived from fruits, nuts, berries, roots, herbs, and other plant sources. Coffee, tea, milk, cocoa, and undiluted fruit and vegetable juices are not considered soft drinks (Pietka and Korab, 2023).

Local African Drinks

Nigerian society has a social culture that involves wining and dining like other cultures. Drinks are vital aspects of these chit chat sessions. These drinks could be manufactured, or freshly brewed and sourced naturally from the environment (Eze, 2022). Eze (2022) went further to list several local brews and drinks in Nigeria to include:

1. **Zobo**
This red popping drink has stood the test of time in many Nigerian homes. Zobo is a healthy non-alcoholic drink made from hibiscus flowers of the roselle plant. From the flowers come the deep red colour it is known for. It can be made in many ways using ginger, garlic, fresh-cut sweet fruits to act as a sweetener or the regular sweeteners sold. Research shows that the hibiscus leaves used in making this refreshing drink lower blood pressure. When served with a sumptuous meal, you can't go wrong with the refreshing Zobo drink.
2. **Kunu**
This rich creamy and high nutrient drink is another to try out. Kunu is a drink predominantly done by the Northerners in Nigeria and it is made with cereals like millet, coconut, dates, groundnut and ginger for extra savour. There are three variants of this drink; kunu aya, kunu zaki and kunu gyada. The high dose of nutrients helps lower the risks of diabetes and reduces cholesterol levels while the fibre found in it aids proper digestive functioning.
3. **Tigernut**
In Nigeria, tigernut milk, also known as *kunnu aya*, is a beloved concoction that, in its most basic form, is made from just two ingredients: tigernuts and water. This beverage is similar to the Spanish drink *horchata de chufa*, where *chufa* means tigernut. The tigernut itself is not actually a nut. It's a tuber of the *Cyperus esculentus* crop. Naming confusion aside, making tigernut milk is a lot like making other nut milks. Soak the tigernuts in water, blend, strain the liquid out, and keep doing this until you've squeezed out all the milk.
This resulting nutty drink, full of protein and high in fiber, is often served cold on its own. It has also been gaining popularity outside Nigeria as a nondairy milk alternative, similar to coconut or almond milk, that can be poured over cereal. But its uses go beyond the culinary, as some insist that the drink is also an aphrodisiac.
4. **Adoyo**
The main source of adoyo is pineapple and pap(made from corn). Adoyo which is pap paired with pineapple improves the sour taste that naturally comes with pap.
5. **Fura da Nono**
From the heart of Northern Nigeria is another drink called fura da nono. This nutritious drink is made from millet, fura, and fermented cow milk (nono). Fura da nono is similar to the consistency of yoghurt but can be lumpy from the fermentation process. The millet used is grounded and set to low heat before the milk is added to it. Other ingredients like ginger and pepper can be added to heighten the taste.

Product Innovation

Chang and Wildt (1994) observed that product features is a major decision variable used by marketers to influence the product evaluations and purchase behaviours of potential customers. To effectively make decisions regarding these variables, marketers seek knowledge about how consumers use product attributes information in the evaluations of products. Besides that, many product features can be included in the communication message. A product with relatively inferior existing features and a brand associated with lower perceived quality are expected to gain more with new features added (Nowlis and Simonson, 1996).
Packaging is often the last impression to consumer before the final purchase decision is made. Packaging has gradually shown its important role in serving consumers by providing information and delivering functions. With its different functionality to ease an to communicate with consumers, there is no doubt about increasingly important role of packaging as a strategic tool to attract consumers' attention and their perception of the product (Ahmad, 2012).
Product quality has been defined as value ; conformance to specifications; conformance to requirements; fitness for use; loss avoidance; and meeting and/or exceeding customers' expectations; Quality is an important working strategy that is well understood in the expectations of customers both inside and outside the company, whether these expectations are explicit or implicit.

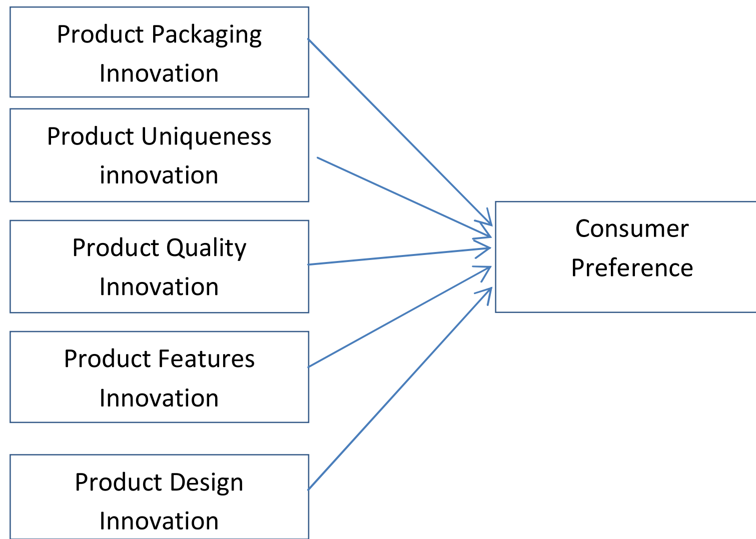

Figure 1: Conceptual Framework

METHODOLOGY

The study adopted a descriptive research design and was conducted in Abia state, Nigeria. Structured questionnaire was used in gathering the data for the study. The population of the study consist of consumers of soft drinks. Purposive sampling and multistage sampling technique were adopted. Abia state was divided into three senatorial zones of Abia North, Abia Central and Abia South. Two Local Government Areas (LGAs) were selected from each of the senatorial zones. All the selected six LGAs were issued with 35 copies of questionnaire each. A total of 210 copies of structured questionnaire were distributed to respondents and only 178 (84.76%) were used for the study In testing the hypotheses, multinomial regression analysis was used considering that preference or choice options are more than two. The model for the study is expressed thus:

$$\log\left(\frac{n_j(x_i)}{n_k(x_i)}\right) = \alpha_j + \beta_{1j}X_{1i} + \beta_{2j}X_{2i} + \beta_{3j}X_{3i} + \beta_{4j}X_{4i} + \beta_{5j}X_{5i} + \varepsilon$$

j = 1,2,…,(k-1), i = 1,2,…p

i = 1,2,…p refers to the individual; j refers to current brand used by individual i

where: $\log\left(\frac{n_j(x_i)}{n_k(x_i)}\right)$= Consumer preference (i.e. 1= others, 2= Spirit, 3= 7up, 4=Pepsi and 5= Coke). This is also the log-odd ratio, that is, the natural logarithm of the odds that most preferred brand will be bought by a particular individual

α_j = constant

X_{1i}= product packaging innovation

X_{2i}= product uniqueness innovation

X_{3i}= product quality innovation

X_{4i}= product design innovation

X_{5i}= product features innovation

ε = error term

$\beta_{1j} - \beta_{5j}$= coefficients of the independent variables: $X_{1i} - X_{5i}$. The independent variables take values from 1 to 5 where: 1= Strongly Disagree; 2= Disagree; 3= Moderate; 4=Agree; 5= Strongly Agree.

The above model was tested using maximum likelihood wherein that value of coefficient is taken which maximizes the likelihood function.

RESULTS AND DICUSSIONS

The socio-economic profiles of the respondents are presented in Table 1 below.

Table 1: Respondents Demographics

Descriptor	Frequency	Percentage
SEX		
Male	107	60.1
Female	71	39.9
Education		
No Formal	3	1.7
Primary	40	22.5
Secondary	54	30.3
Tertiary	81	45.5
AGE		
<= 20	7	2.2
21 – 30	65	20.8
31 – 40	133	42.6
41 – 50	68	21.8
50 & above	31	9.9
MARITAL STATUS		
Single	101	56.7
Married	77	43.3
	178	**100**

Source: Field survey

Table 2 below indicates the causal relationship between soft drink product innovation and consumer preference.

Table 2: Influence of Product innovation on Consumer Preference

Variable	-2 Log Likelihood of Reduced Model	Chi-Square	df	P value
Intercept	390.794	1.747	4	.782
Packaging	401.657	12.610	4	.013
Uniqueness	414.570	25.523	4	.000
Quality	405.893	16.846	4	.002
Features	401.770	12.723	4	.013
Design	393.339	4.293	4	.368

Source: Field survey

Packaging innovation is a significant predictor of consumer preference of soft drinks brands (p= .013). This finding is supported by Anucha (2020) where it was observed that significant relationship exists between packaging material innovation and consumer patronage intention of food and beverage brands. Currently, soft drinks are packaged in PET plastic bottles, paper cartons, pouches, aluminium cans and glass bottles. Amongst these, the most widespread for soft drinks is PET plastic bottles. Local African drinks are yet to compete favourably in terms of packaging with its soft drinks counterpart. What we see is the recycling of used soft drinks packages to package local African drinks. This practice has not only inhibited consumers from patronizing these local African drinks due to its unattractiveness and health concerns but may also be responsible for the volume of sales experienced. Marketers of local African drinks should begin to think of packaging their products to be in tandem with the soft drinks at least in order to positively swing consumers' preference in its direction. However, with the growing sustainability concerns about product packaging, marketers of local African drinks need to think about how to deliver their products in a sustainable way.

Soft drinks uniqueness innovation significantly influence consumer preference (p = .000). This position is supported by Carpenter, Glazer and Nakamoto (1994) where they found that uniqueness of novel features make them receives greater weight in preference judgments. Soft drinks uniqueness innovation signals new and unexpected features which in turn assist in arousing attention and getting consumer preference. The local African drinks should not only magnify its uniqueness in comparison with the soft drinks but keep innovating them as this significantly drives consumer preference.

Product quality innovation is a significant predictor of consumer preference (p= .002). This findings is supported by Wulandari & Iskandar (2018) and this means that consumers preference of soft drinks is

driven by the fact that the observed product quality innovation satisfies customer needs, serves its purpose and meets industry standards. Growing local African drinks business will involve continuous innovation of the drinks to be in sync with customers' expectations as well as measuring up with industry standards.

Consumer preference is not significantly influenced by product design innovation (p= .368). The finding of Young (2008) lend credence to this by observing that the most attractive or popular design is not necessarily the most effective. It may get lost in shelf clutter or fail to communicate key message quickly and clearly. However,

Product features innovation has a significant effect on consumer preference (p= .013). Chang and Wildt (1994) supported this finding when they observed that product features influences purchase behaviour. Key elements that provide the value and capabilities of soft drinks drive consumers preference. Local African drinks can take a cue here by adding customer-centric features so as to attract consumers preference and grow the this sector.

CONCLUSION

The study has been able to establish a causal relationship between product innovation and consumer preference in Abia state. A positive consumer preference for brand or product results in sale and sales sustained means growth. The study has revealed how innovations in the market offer significantly influence consumer preference. Since the local African drinks of interest in this study are in the same category of non-alcoholic drinks with the soft drinks, the study therefore recommends that endogenous African drinks business adopt the following that have helped in growing the soft drink business:

1. African drinks business should innovate its packaging. They should start building its own sustainable packages so as to be at par or exceed what is obtainable in the carbonated soft drink sector.
2. The local African drinks business should emphasize and innovate its market offer uniqueness.
3. The endogenous African drinks quality should be innovated in such a way that it meets industry standards, serves its purpose and satisfies customer needs.
4. Local African drinks business should innovatively add customer-centric features to its products so as to attract consumers' preference and grow this sector.

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ASSESSMENT OF AGRIBUSINESS ORIENTATION AS A STRATEGY FOR POVERTY ALLEVIATION AMONG FARMING HOUSEHOLD IN ABIA STATE

Onwukwe, F. O., Okezie, C. R., Udokure, U. J and Ndukwe, E. C.
Michael Okpara University of Agriculture Umudike, Abia State, Nigeria
Corresponding author: onwukwe.felix@mouau.edu.ng

ABSTRACT
This study assessed agribusiness orientation as a strategy for poverty alleviation among farming households in Abia State. The specific objectives were to examine the socioeconomic profile of the farming households in the study area, examine the level of agribusiness orientation of the farming households in the study area, examine the poverty status among farming households in the study area, determine the effect of agribusiness orientation on poverty status of farming household in the study area; and to examine the determinants of agribusiness orientation in the study area. This study adopted well-structured questionnaires for data collection from 140 farming households. A total of one hundred and forty (140) respondents made up the sample size for the study. Data were analyzed using simple descriptive statistics, consumption expenditure poverty line, and multiple regression. The study's findings revealed that 63.3% of the respondents had low agribusiness orientation. The study also revealed that 65% of the respondents had a poverty status of 0.5 – 0.99. The study indicated that sex, marital status, income, extension visits and household size positively influenced agribusiness orientation at 10%, 5%, 10%, 10% and 1% probability levels, respectively. Household size and cooperative membership negatively influenced the poverty status of the farming households at 1% and 10% probability levels, while total household expenditure and agribusiness orientation positively influenced the poverty status of the farming households in the study area at 10% and 10% probability levels. Farming households new to agribusiness activities should continue in the enterprise, although they should not expect to make any profits in the early stage; the experience gained over time will influence their agribusiness orientation, stimulating profitability and growth.
Keywords: Agribusiness orientations, poverty alleviation, farming households

INTRODUCTION

Orientation in all forms has the potential of empowering people by increasing self-confidence, capacity to improve livelihoods, and increased participation in wider processes of social and economic activities. Despite the great potential of agriculture in Nigeria and Africa at large, orientation and capacity development initiatives in agriculture are not yielding the expected results (Shultz, 2019). To spur rural development, food security, and agricultural productivity, there is a need for government and non-governmental organizations to embark on massive sensitization and coordination of every farming household towards investment in agribusiness. More recently, development practitioners and policymakers have come up with policies and programs regarding farmers' orientation, especially in the areas of crop and animal production, market participation, agro-industries, and post-harvest activities, which could enhance the income of the rural dwellers and as well reduce poverty level (Wilkinson & Rocha, 2018).

Agribusiness orientation is inarguably the culture of creating and inculcating in farmers the most effective and efficient ways of producing superior farm produce for buyers and, thus, continuous higher performance for the business. Agribusiness orientation encourages food availability, supply of farm produce, and the promotion of agro-enterprises which can provide positive impacts on employment in both rural and urban areas; offer access to market among farming households and enhance food security by reducing post-harvest losses, and extend the shelf-life of food. The combined effects of the high level of employment, food insecurity, and limited competitiveness in the agribusiness sector have led to a continuous increase in the poverty level of farmers in developing countries. Hence, there is a need for reliable and positive capacity development and orientation in agriculture in order to offer complete knowledge, skills, financial, and other inputs that support agribusiness investment and poverty alleviation. In this sense, a one-off training or orientation is not enough for potential farmers/agripreneurs, considering their high mobility and dynamism on the one hand; and the challenges of the agriculture sector on the other. After the capacity development has been completed, continuous orientation and training should be integrated to encourage and boost potential and current agripreneursto remain focused and to equip them with additional up-to-date skills and information, such as market development strategies, investment opportunities in the sector, modern practices of agricultural product transformation, and other knowledge

and competences in value addition. Orientation and training should also help to refine the business technique and map out business opportunities.

Agricultural orientation is key to poverty reduction and food security in sub-Saharan Africa (SSA). In Nigeria, this orientation has focused on shifting subsistence-based production to market-oriented farming. This is because, over the last decade and a half, major emphasis has been placed on the increase of production systems, promotion of farmers' cooperatives, and enhancement of farmers' access to markets. Although the country recorded an increase in food crop market value, subsistence farming is still prevalent amongst smallholder farmers. It is a known fact that agribusiness activities are the antidote to poverty reduction and job creation in an unstable economy like Nigeria and it requires the combined efforts of individuals and government through proper orientation and training programs to inspire potential farmers, but this is lacking and poverty is prevalent among farmers.

Although, poverty is a common name in Nigeria despite various economic development policies like agribusiness designed to alleviate poverty through human capital development. In fact, Popoola (2018) argued that in all economic recession, as Nigeria is now, agribusiness practices among the young populace will be a workable solution to poverty. Agropreneurship is believed to be an important mechanism of economic growth and development because of their role in promoting prosperity by creating new jobs, reducing unemployment and increase economic growth and development of a region. As the country aims to achieve commercialized agriculture, there is a need to understand what factors can influence decisions to participate in agriculture in order to alleviate poverty.

The world's poverty indexes revealed that two third (2/3) of the population live in rural areas and their main occupation is farming mostly smallholders (Todaro & Smith, 2015). Enhancing the potential of farming households is critical in alleviating poverty and producing food for the world (Todaro and Smith, 2015). Faming household occupies 70-80 percent of farmland. At the same time, they act as catalyst for local economy and they are the main source for labor worldwide (FAO, 2015). Nevertheless, farming household are often prone to food insecurity and myriad challenges ranging from ineffective orientation to complete absence of orientation. More so, limited access to knowledge and innovation; lack of farm inputs and extension services; exposure to climatic shocks and prices instability; exclusion from decision making and international policy have pushed farming household into abject poverty (FAO, 2015). Consequently, these constraints could exert negative impact on the present and future food needs. According to Labich and Dellosa (2014), investment intention in agricultural related business especially in the African setting, have been generally agreed to be constrained by poor orientation in agribusiness, absence of efficient market for the farmers, limited access to finance, absence of enabling environment, market information and managerial skills.

In addition, one of the problems confronting the world is the rising level of poverty in many nations, as large number of people are not earning up to $1.25 daily (WHO/UN, 2010). This prompt United Nations Millennium Development Goals to set eight 8- goals signed in September 2000 by 191 UN members among which was "to eradicate extreme poverty and hunger by the year 2015 (WHO/UN, 2010), these were to be achieved through massive orientation agribusiness. However, these objectives are not realizable in Nigeria probably due to inconsistent government policies and corruption. The state of poverty in the world is often linked to limited knowledge and poor orientation on investment decision and limited access business and market information. Large number of people in the rural area lack knowledge of the agribusiness investment opportunities (Kazeem, 2018).

Emanating from the above, Ogundele (2017) conclude that the economy of Nigeria and that of other developing countries are largely characterized and defined by the rate of poverty, hunger and unemployment subsisting in them. It seems as if all strategies applied in the past to fight poverty proved ineffective, but the world seems to have found a most promising strategy through agribusiness activities and practices. There seems to exist a dearth of empirical knowledge on agribusiness orientation on poverty alleviation in Southeast Nigeria. Despite the significant academic attention paid to agribusiness, consensus has yet to be achieved with respect to agribusiness orientation and poverty alleviation. This study sought to close this gap by examining the level of agribusiness orientation of the farming households; poverty status among farming households and determine the effect of agribusiness orientation on poverty status of farming household in the study area.

METHODOLOGY

The study was conducted in Abia State. Abia State is located in the South East geopolitical zone of Nigeria. It is bounded by Imo State on the West, Ebonyi and Enugu State on the North; Cross Rivers and AkwaIbom state on the East and by River State on the South. The state has a population of about

2,833,999 persons (NPC, 2007).Geographically, the state lies within latitude 4^0,49 and latitude North of equator and longitude $6^0$47 North and longitude north of Greenwich meridian. The state has a tropical climate with two seasons, the rainy season and dry season. The rainy season last from April to October while the dry season is from mid-November to March. Two rainfall peaks are observed during August to September with the dry spell in August (August break). The rainfall peaks are followed by three to four months of dry season, which characterized by dry harmattan winds. The farmers also keep livestock such as catfish, poultry, Goat, sheep, Pig, Rabbit. The tree crop (cash crops) cultivated include cocoa, oil palm, cashew, kola nut, rubber. The crop cultivated includes yam, cassava, rice, maize, sweet potatoes, cocoyam, melon, garden egg, fruit and vegetables.

Multistage sampling technique was adopted in this study. In the first stage, two agricultural zones were randomly selected from the 3 agricultural zones in Abia State. In the second stage, three local government areas known for agricultural activities were purposively selected from the two selected agricultural zones. In the third stage, two communities were selected from each of the three selected local government areas. This gave a total of six (6) communities. Finally, ten (10) respondents each were purposively selected from each communities and this gave a total of 60 respondents for the study.

Model Specification

For objective (iii) which was to examine the poverty status among farming households in the study area,consumption expenditure poverty line was used. The formula for consumption expenditure poverty line was stated as:

$$PCE = \frac{\text{per capita weekly expenditure for the ith household}}{\text{per capita weekly expenditure for all households}} \ldots 3.1$$

Where;

PCE = Per capita consumption expenditure

PCE $\geq$ 1 for non-poor households

PCE < 1 for poor households

Objective (iv) which was to determine the effect of agribusiness orientation on poverty status of farming household in the study area was tested using logit model. The model was stated thus;

$Y = f(X_1)$ …3.2

$Y = \beta_0+\beta_1X_1+ei$ …3.3

Where Y = Poverty Status (1 = Non-poor, 0 = Poor)

X_1= Agribusiness orientation (Number of times)

β_1 = Regression coefficient to be estimated

β_0 = Slope

e_i = Error term

For objective (v) which was to examine the determinants of agribusiness orientation in the study area was tested with multiple regression model. The model was specified thus;

$Y = f(X_1,X_2,X_3,X_4,X_5,X_6)$ …3.4

$Y = \beta_0+\beta_1X_1+\beta_2X_2+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+ei$ …3.5

Where Y = Agribusiness orientation (Likert generated score)

X_1= Age (Years)

X_2 = Income (₦)

X_3 = Experience (Years)

X_4 = Education (years)

X_5= Cooperative society membership (Yes = 1, otherwise = 0)

X_6= Access to extension services (Yes = 1, otherwise = 0)

$\beta_1 - \beta_6$ = Regression coefficient to be estimated

β_0 = Slope

e_i = Error term

RESULT AND DISCUSSIONS

Assessment of socioeconomic profile of farming households in the study area

The socio-economic profile of farming households are presented in the table below:

Table 1 Age Distribution of the Respondents

Range	Frequency	Percentage
25.00 - 34.00	6	10.0
35.00 - 44.00	27	45.0
45.00 - 54.00	21	35.0
55.00+	6	10.0
Total	60	100.0
Minimum=27	**Maximum=60**	**Mean=43.6**

Source: Field survey data

10% of the respondents fell within the age range of 25 - 34 years old. This was followed by 45% of the respondents who had an age range of 35 - 44 years, 35% of the respondents fell within the age range of 45 – 54 years while 10% of the respondents fell within the age range of 55 years and above. With a mean age of 43.6 years, it implies that most of the farming households are within their middle, active and productive ages (Nwaliejі*et al.*, 2014).

Table 2:Household Size Distribution of the Respondents

Range	Frequency	Percentage
< 3.00	10	16.7
3.00 - 5.00	37	61.7
6.00+	13	21.7
Total	**60**	**100.0**
Minimum=1	**Maximum=8**	**Mean=3.97**

Source: Field survey data

16.7% of the respondents had a household size of below 3 dependents. This was followed by 61.7% of the farming households who had a household size of 3 – 5 dependents, 21.7% of the respondents had a household size of 6 dependents and above. A mean household size of 3.97 dependents implies a relatively large family size which in turn means an in increase in family expenses since almost all members depends on the family. Ogwumike (2002) reported that the number of persons living in a household is in close relation with consumption, emphasizing that the total expenditure and household size are positively and directly related.

Table 3:Income Distribution of the Respondents

Range	Frequency	Percentage
30000.00 - 39999.00	19	31.7
40000.00 - 49999.00	34	56.7
50000.00+	7	11.7
Total	**60**	**100.0**
Minimum=30,000	**Maximum=60,000**	**Mean=42,100**

Source: Field survey data

The result indicates that (31.7%) of the respondents had an income of an income of ₦30,000 – ₦39,999. (56.7%) of the respondents had an income of ₦40,000 – ₦49,999, while (11.7%) of the respondents had an income of ₦50,000 and above.

Table 4:Capital Distribution of the Respondents

Range	Frequency	Percentage
< 20000.00	1	1.7
20000.00 - 39999.00	1	1.7
60000.00 - 79999.00	2	3.3
80000.00 - 99999.00	3	5.0
100000.00 - 119999.00	2	3.3
120000.00+	51	85.0
Total	**60**	**100.0**
Minimum= 19,000	**Maximum=350,000**	**Mean=193,733.3333**

Source: Field survey

The result indicates that (1.7%) of the respondents started their investments with a capital of less than ₦20,000. This is followed by (1.7%) of the respondents started their investments with a capital of ₦20,000

– ₦39,999. (3.3%) of the respondents started their investments with a capital of ₦60,000 – ₦79,999, (5%) of the respondents started their investments with a capital of ₦80,000 – ₦99,999, (3.3%) of the respondents started their investments with a capital of ₦100,000 – ₦119,999 while (685%) of the respondents started their investments with a capital of ₦120,000 and above.

Table 5:Sex Distribution of the Respondents

Category	Frequency	Percentage
Female	20	33.3
Male	40	66.7
Total	**60**	**100.0**

Source: Field survey data

33.3% of the respondents were females while 67.7% of the respondents were females. This implies that males are more involved in agribusiness activities than females in the study area. This result disagrees with the findings of Adebisi *et al.* (2012) and Owombo (2012) that discovered that female farmers dominated food/fruit crop production in south-western Nigeria but the result agrees with the findings of Oyediran *et al.* (2014); Tambo and Gbemu (2010), whose findings indicated that men were majorly involved in melon and tomato production in their respective study areas.

Table 6: Marital status Distribution of the Respondents

Category	Frequency	Percentage
Single	41	68.3
Married	9	15.0
Separated	6	10.0
Widowed	1	1.7
Divorced	3	5.0
Total	**60**	**100.0**

Source: Field survey data

68.3% of the respondents in the study area are single; 15% are married; 5% are divorced, 10% are separated while 1.7% of the respondents were widowed.

Table 7:Educational Distribution of the Respondents

Category	Frequency	Percentage
No formal education	0	0
Primary	15	25.0
Secondary	29	48.3
Tertiary	16	26.7
Total	**60**	**100.0**

Source: Field survey data

25%, 48.3% and 26.7% of the respondents had primary, secondary and tertiary education respectively. 100% of the respondents in the study area were literates with diverse levels of formal education; from primary to tertiary level. This implies a very high level of literacy (ability to read and write) abides in the study area which would enable the farming households to better utilize effectively and efficiently available resources. High literacy level is surely expected to improve technology adoption thereby increasing income (Ezeh, 2007).

Table 8: Distribution of the Respondents according to extension visits

Category	Frequency	Percentage
No	55	91.7
Yes	5	8.3
Total	60	100.0

Source: Field survey

91.7% of the respondents had no extension visits while 8.3% of the respondents had extension visits.

Examination of the level of agribusiness orientation among farming households in the study area

Table 9 Distribution of the Respondents according to Agribusiness Orientation

Category	Frequency	Percentage
Very High	1	1.7
High	7	11.7
Moderate	0	0
Low	14	23.3
Very low	38	63.3
Total	**60**	**100.0**

Source: Field survey data

1.7% of the respondents had a very high agribusiness orientation. 11.7% of the respondents had a high agribusiness orientation, 22.3% of the respondents had a low agribusiness orientation while 63.3% of the respondents had a very low agribusiness orientation.

Examination of Poverty Status among Farming Households in the Study Area

Table 10: Distribution of the Respondents according to Poverty Status

Range	Frequency	Percentage
< .50	10	16.7
.50 - .99	39	65.0
1.00 - 1.49	2	3.3
1.50 - 1.99	2	3.3
2.00 - 2.49	3	5.0
2.50 - 2.99	1	1.7
3.00+	3	5.0
Total	**60**	**100.0**

Source: Field survey data

The result indicates that (16.7%) of the respondents had poverty status of less than 0.5. This is followed by (65%) of the respondents who had poverty status of 0.5 – 0.99. 3.3% of the respondents had poverty status of 1 – 1.49, 3.3% of the respondents had poverty status of 1.5 – 1.99, 5% of the respondents had poverty status of 2 – 2.49, 1.7% of the respondents had poverty status of 2.5 – 2.99 while 5% of the respondents had poverty status of 3 and above.

Effect of Agribusiness Orientation on Poverty Status among Farming Households in the Study Area

Table 11: Analysis of the Effect of Agribusiness Orientation on Poverty Status among Farming Households in the Study Area

Independent variable	Beta coefficient	Standard error	t-value
(Constant)	1.694	.485	3.491**
Sex	.199	.146	1.364
Marital status	.084	.055	1.535
Education	.012	.014	.869
Household size	-.301	.043	-6.938***
Income	1.990E-005	.000	1.415
Cooperative membership	-0.578	.257	-2.252*
Extension	-.095	.212	-.447
Capital in business	-3.047E-007	.000	-.288
Total household expenditure	1.445E-005	.000	2.539*
Agribusiness Orientation	-.024	.011	-2.155*
R	**0.875**		
R-square	**0.766**		
Adjusted R-Square	**0.718**		
F-Ratio	**16.046*** **		
DW	**1.807**		
Significant level	**1%*** 5%** 10%***		

Source: Field survey data

Household size was negative and significant at 1% level. The negative sign of this coefficient implies that as household size increases, the poverty status of the respondents' decreases. This is true because a high household size implies a large and free family labour to be utilized by the farm. This would lead to lower poverty status because no labour cost is incurred. This is in line with *a priori* expectation.

Cooperative membership was negative and significant at 10% level. The negative sign of this coefficient implies that respondents that are co-operators tend to have a lower poverty status. This is true because the respondents are open to new and improved agricultural innovations as a result of being members of cooperative societies. This would definitely lead to better agricultural productivity which will lead to lower poverty status. This is in line with *a priori* expectation.

Total household expenditure was positive and significant at 10% level. The positive sign of this coefficient implies that as total household expenditure decreases, the poverty status of the respondents' decreases. This is true because, a low household expenditure implies that little was spent on the dependents. This will lead to lower poverty status. This is in line with *a priori* expectation.

Agribusiness orientation was negative and significant at 10% level. The negative sign of this coefficient implies that respondents that are agribusiness oriented tend to have a lower poverty status. This is true because respondents that are able improve their livelihood and increase their participation in wider processes of agribusiness activities tend to have lower poverty status. This is in line with *a priori* expectation.

Determinants of Agribusiness Orientation

Table 12: Analysis of the Determinants of Agribusiness Orientation

Independent variable	Beta coefficient	Standard error	t-value
(Constant)	9.712	6.140	1.582
Sex	4.535	1.780	2.548*
Marital status	1.832	.663	2.762**
Educational	-.245	.183	-1.338
Income	.000	.000	2.304*
Cooperative membership	3.132	3.301	.949
Extension	6.284	2.598	2.419*
Capital	4.621E-006	.000	.338
Total expenditure	5.804E-005	.000	.792
Household size	2.475	.439	5.635***
R	**0.844**		
R-square	**0.712**		
Adjusted R-Square	**0.660**		
F-Ratio	**13.702*** **		
DW	**1.956**		
Significant level	**1%*** 5%** 10%***		

Source: Field survey data

Sex was positive and significant at 10% level. The positive sign of this coefficient implies that males being more involved in agribusiness activities means they are more agribusiness oriented. This is in line with *a priori* expectation.

Marital status was positive and significant at 5% level. The positive sign of this coefficient implies that married respondents are more agribusiness oriented. This is because married individuals are more serious and focused on their agricultural ventures making them agribusiness oriented. This is true because the survival of the family rests completely on their shoulders. This is in line with *a priori* expectation.

Income was positive and significant at 10% level. The positive sign of this coefficient implies that as income of the respondents increases, the more agribusiness oriented they become. This is true because they have more money to improve their livelihood and as well invest in more agribusiness activities. This is in line with *a priori* expectation.

Extension visits was positive and significant at 10% level. The positive sign of this coefficient implies that the higher the extension visits, the more agribusiness oriented they become. This is true because the more extension visits the respondents get the more new and innovative agricultural ideas they are open to. This is in line with *a priori* expectation.

Household size was positive and significant at 1% level. The positive sign of this coefficient implies that as household size increases, the more agribusiness oriented the respondents' are. This is true because a high household size implies a large family to cater for. This means that the household head has to diversify

more his or her livelihood sources and as well invest in more agribusiness activities. This is in line with *a priori* expectation.

CONCLUSION AND RECOMMENDATIONS

The empirical result of this study revealed various points of interest for meat dealers, policy makers, government and other researchers. Based on the empirical results, majority of the farming households have above-average agribusiness orientation. However, sex, marital status, income, extension visits and household size positively influenced agribusiness orientation. Household size and cooperative membership negatively influenced the poverty status of the farming households while total household expenditure and agribusiness orientation positively influenced the poverty status of the farming households in the study area. Based on the findings of this result, the following recommendations were made:

i. Farming households who are new to agribusiness activities should continue in the enterprise although they should not expect to make any profits in the early stage; the experience gained over time will influence their agribusiness orientation, which will stimulate profitability and growth.
ii. Farming households should be trained on how to adopt new and innovative farming technologies so as to increase their agribusiness orientation.

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EVALUATION AND EFFECT OF NIGERIAN PRESENT RECESSION ON CATFISH FARMERS IN ABA, ABIA STATE, NIGERIA

Okolo, Amaka N., Nwadighoha, Emmanuel E. and Onyemachi, Okechukwu N. D.
Michael Okpara University of Agriculture, Umudike, Abia State Nigeria
Corresponding author: okoloamaka69@yaho.com

ABSTRACT
The economic recession presently facing our country, Nigeria, has brought so many declines in the economy, characterizing it with signs like exchange rate fluctuation, rising cost of goods and services, government inability to pay salaries, poor performance of macroeconomic variables and endogenous African businesses, including catfish farming business. This study was designed to evaluate the effect of the present Nigerian recession on the fish farming business in Aba, Abia State. The aim is to know how their catfish business is surviving with the present inflation confronting the nation. A combination of observation and face-to-face interviews was used as the methodology. Data was collected from several catfish farmers with over ten years of experience in Aba, Abia State. The study shows that the present bad economy, inflation, and economic factors have brought hardship to the farmers, making it difficult for them to break into their catfish business. The absence of constant electricity, the high cost of fish feed, multiple government taxation, and bad roads, particularly in the metropolitan City of Aba, make the business more challenging for the farmers. The government was recommended to create an enabling environment for the farmers, assist them with soft loans at the federal and state levels, and checkmate taxes on farmers, among other things. In conclusion, the state and federal government should show more interest in the fishery since research has confirmed that its sector plays an important role in the Nigerian economy, especially in job creation and food production.
Keywords: Recession, Catfish farming, Effect

INTRODUCTION

The Nigerian economy slipped into recession in the second quarter of 2016, which recorded two consecutive quarters of negative growth rate in Gross Domestic Product. According to CBN and NBS report (2016), the Nigeria economy contracted by -2.06 per cent in the second quarter of 2016 as a result of a contraction of 0.36 per cent in the first quarter of 2016, the economy further sank into recession by 2.24 per cent and 1.03 per cent in the growth rate of GDP. The decline of -2.06 per cent in Nigeria's Gross Product [GDP] in the second quarter was 1.70 per cent lower than the growth rate of -0.36 per cent in the first quarter and also 4.41 per cent lower than the growth rate deepened the 2016 recession in Nigeria compared to when the Nigerian economy declined by 0.51 per cent and 0.82 per cent in two consecutive quarters in 1987 during the regimes of Ibrahim Babangida.

Economic recession is a decline in the economy which is associated such symptoms like exchange rate fluctuations, rising cost of goods and services, government inability to pay workers and other stipends or to meet other financial rights and poor performance of other macroeconomic variables which define the state of the economy at the given period.

(Farayibi, 2016). The collapse in oil prices, coupled with the COVID-19 pandemic, is expected to plunge the Nigerian economy into a severe economic recession, the worst since the 1980s.The macroeconomic impact of the COVID-19 pandemic will likely be significant, even if Nigeria manages to contain the spread of the virus. Oil represents over 80% of Nigeria's exports, 30% of its banking–sector credit, and 50% of the overall government revenues. With the drop in oil prices, government revenues are expected to fall from an already 8% of GDP in 2019 to a projected 5% in 2020. This comes when fiscal resources are urgently needed to contain the COVID-19 outbreak and stimulate the economy. While the long-term economic impact of the global pandemic is uncertain, the effectiveness of the government's response is important to determine the speed, quality, and sustainability of Nigeria's economic recovery. Besides the immediate effect of containing the pandemic and stimulating the economy, addressing bottlenecks hindering the economy's productivity and job creation will be even more urgent.

The country has moved from an oil recession to a COVID-19 recession, leaving national and state economies struggling to stay afloat. The entrepreneurship business contributes much to economic growth and social development, bringing about employment opportunities. The government in developed

countries helps entrepreneurs with policies, plans and programmes to turn around the old practices involved in setting up and operating their businesses, unlike in developing countries like Nigeria, where the reverse is the case. Often, entrepreneurs introduce new products and ideas, establish unknown needs, create employment and make wealth available in the economy. Bridging the gap in Nigeria through domestic production offers great investment potential for the Nigerian populace. Also, it increases the inflow of foreign direct investment into the country. (Oyakhilomen & Zibah, 2013). Also, unstable conditions of the exchange rate can result in imported inflation. Economies with high reliance on imported goods for services suffer imported inflation. Such inflation could arise from dumping goods in the importing economy as inputs or final output (Otto & Ukpee, 2016). Major imported inputs used in aquaculture include micronutrients for feed formation, feeds (such as Coppens and Artemia), hormones (such as Ovaprim and Ovalin), drugs, nets, water quality, and test kits. The high prices of these imported goods are transmitted into the local economy, which leads to an inflationary tendency.

The ban on importing some animal protein sources, such as frozen chicken, has increased the demand for fish in Nigeria. Recently, at a three–day hybrid national stakeholders advocacy and capacity-building workshop on the Implementation of Sustainable Small Scale Fisheries in the context of food security and poverty eradication (SSF Guidelines) in Nigeria, organized by Lagos State University (LASU), in collaboration with the FAO, International Collective in support of fish workers (ICSF) and World – Fish disclosed that the current yearly domestic fish demand of the country is 3.6 million metric tonnes, while the total about 2.5 million metric tonnes. This gap made Nigeria the largest importer of frozen fish in Africa and a destination for investment (Ibirogba, 2022).

According to Kauffman (2005), the business environment in any country across the globe is usually deemed dynamic and hard, especially for micro and small enterprises (MSEs), and various reasons are adduced for this. These MSEs that contribute to their national economies constitute many businesses in developing countries but do not grow as they should, especially because of three main factors: poor infrastructure, corruption and insecurity. In the Nigerian business environment, MSEs face a plethora of challenges in addition to the earlier listed three that hamper their growth, such as lack of patronage from clients and customers, lack of favourable government policies, lack of requisite managerial skill sets, lack of access to funds and credit loans, amongst others. (Okpara & Wyna, 2007; Iidunni *et al.*, 2017).

Objectives

In this study, we are looking at catfish farming, one of the entrepreneurial activities many undertake as a livelihood in Nigeria. The study aims to ascertain the present condition of catfish farmers in the present state of the economy of our country, Nigeria. The study will also examine the impact of the present recession faced by our country, Nigeria, on their fish farming business. Also, the study will ascertain how much the catfish farmers have benefitted from the government regarding loans, policy-making, infrastructural development and the like. Narrowing our study to Aba metropolitan city in Abia state, we can ascertain how much impact the recent recession has had on their catfish farming business. Aquaculture in Nigeria dates back to the colonial era. However, current aquaculture efforts were sparked by rearing common carp (Cyprinus carpio) at Panyam fish farms in Plateau state (Ajayi, 1971). The major species cultured in Nigeria include tilapia (Oreochrononus niloticus, O, O, O. mossambicus, O. aureus) and African catfish (Clarias ganepinus, Heterobranchus).

Aquaculture can be defined as the rational rearing of fish in an enclosed and shallow body of water where all its life processes can be controlled. It is an important sector for the nation's economic development at a time when the government is seeking ways to diversify the economy, from being purely a potential means of contributing to the food security of the nation directly by producing fish for food and indirectly by generating employment for the teaming unemployed populace, save foreign exchange and generate foreign exchange through export of fish and fish products. According to Ayinla (2012), aquaculture is the fastest-growing food-producing industry in the world. Fish itself has also been identified as a low–cost protein source with nutritional benefits (Kaleem & Sabi, 2021)

The problem of poor infrastructure, such as the absence of good access roads to farm sites and steady electricity, remains a big challenge to the catfish farmers. Poor power supply adversely affects the rate of water supply to ponds, and in most cases, generators are used; a recycling system should have been practised. The use of this generator adds to their cost of production. The high feed cost is a major constraint to the fish farming business in Nigeria. Feeds, a major input in the fish prod auction business, are very expensive and, in some cases, only available occasionally. Also, the current rise in the exchange rate has yet to help the feed importers or the feed buyers, the catfish farmers.

In Nigeria, fish consumption accounts for about 35% of animal protein consumption. Recent data show Nigeria produced just over 600,000 metric tonnes of fish in 2007. On the other hand, consumer demand

was reported at 2.66 million metric tons. It was not only partly due to imports of about 740,000 metric tons in the year 2007 but also to the rising population of Nigeria and its attendant increase in fish demand and its projection. Thus, there is a national demand-supply gap, with fish importation making up the shortfall at the cost of almost 0.5 billion US dollars per annum. (FDF, 2010). This leads to a resultant foreign exchange drain on the nation's economy. It is not sustainable. However, the long-term solution to the domestic fish supply gap still lies in boosting production through sustainable aquaculture practices. (Aihonsu, 2001).

The story of aquaculture in Nigeria is about catfish culture, and the hope for fish supply in Nigeria hangs on its development and culture. According to Osawe (2007) and Ugwumba and Orji (2007), the constraints to investment in aquaculture, for example, in the Niger Delta, include scarcity of quality seeds (fingerlings), high cost of feeds; high cost of labour; inadequate water supply; lack of land for pond establishment; lack of capital; lack modern technology; poor storage facilities; high cost of transportation, mortality of fishes due to diseases and water pollution and poaching.

Conceptual Framework

According to (Dagtekin *et al.*, 2007), Fish farming provides important services, including supporting nutritional well-being, providing feedstock for the industrial sector, contributing to rural development, increasing export opportunities, and more effective administration of natural resources and biological diversity. Fish rearing is an efficient means of animal protein production. It provides essential nutrition for over one billion people, including at least 50 per cent of animal protein for 400 million people from the poorest countries (WBG, 2011). According to Ayinla (2009), the main source of protein for many people in developing economies is and must continue to be fish. Efficient financial management in aquaculture can make a difference between profits and losses. The poor regard of aquaculture as an economic activity has made it difficult to promote commercialization, as investors were not convinced that aquaculture could be a profitable enterprise (Gintoga et al., 2004).

The present inflation in Nigeria has increased the cost of goods, deepened poverty and made life difficult for most of the population. It has induced uncertainty, discouraged savings, promoted consumption and has posed a serious threat to macro-economic stability, which results in high social costs. (Bawa and Abdullahi, 2012; Bawa et al. 2016). Fish feed accounts for up to 70% of production costs, according to CAFFAN, and has increased by over 50% since last year and tripled farmers' production costs.

Table 1: Showing Inflation Rate On Fish Feed Cost Between 2022 And 2023

FEED TYPE	COST PRICE 2022	COST PRICE 2023
Blue crown 2mm	#11,000	#15,700
Blue crown 3mm	#9,500	#13,000
Blue crown 6mm	#8,000	#12,000
Blue crown 9mm	#7,500	#11,000

Lingelbach *et al.* (2005) noted that there is a distinction between entrepreneurship in an emerging market and that of a developed economy. They observed that the degree of market efficiency influences the practice of entrepreneurship. They further observed that entrepreneurs in inefficient markets have, to some extent, been able to live above some of the inefficiency. They identified three key factors that distinguish entrepreneurs situated in developing countries. They recognized that the opportunities for entrepreneurs in developing countries are much broader, giving entrepreneurs a chance to diversify their portfolios. Entrepreneurs can, therefore, use some of their investments as a hedge against the risk encountered in other industries. They argued that as much as the opportunity in the developing market is broader, the inherent risk in doing business in this environment is much higher than in developed economies. This also affects the catfish business in Nigeria, a developing country.

The entrepreneurship business contributes to economic and social development, bringing about development and employment opportunities. Developed countries' governments help entrepreneurs with policies, plans and programmes to turn around the old practices in setting up and operating their businesses. Entrepreneurs often introduce new products and ideas, establish unknown needs, create employment, and make wealth available in the economy.

The state of the country's road network makes it hard for entrepreneurs in the agricultural sector to transport harvested produce from farms to processing factories. The poor supply of electricity has negatively affected many businesses. The outcome of power problems has prompted entrepreneurs to generate power through expensive ways that have increased their production costs and made their products uncompetitive due to high prices. According to Oteh (2009), an economist views

entrepreneurship as a combination of resources, labour, materials, and other assets, so their value is greater than individuality. From a management perspective, entrepreneurship would entail introducing a change, an innovation or a new order.

Empirical Review

Udoh and Akpan (2019) examined the influence of macroeconomic variables on the growth of Nigeria's fishery sub–sector. The data for the study had been obtained from the Central Bank of Nigeria, the Food and Agricultural Organization, and the World Bank. The study covers the period from 1961 to 2017. The results revealed that aquaculture, artisanal, and total fish production grew exponentially at 8.90%, 3.75%, and 4.25%, respectively. According to their study, various other factors, such as demand shocks, food imports, and variable exchange rates, affected artisanal fish production in the long – run, while exchange rate and demand shocks were significant in the short–run period. For aquaculture production, demand shocks, credit potential, inflation, food import, and exchange rate were significant policy variables in the long – run. Their findings revealed that some macroeconomic variables are critical in achieving adequate prospective and full potential in the country's fishery sector. They advised that fish imports should be gradually restricted and the economic system regulated to ensure the stability of the naira exchange for the US dollar.

In their study, Onuwa *et al.* (2023) analyzed catfish productivity among smallholders in Ekeemor, Bayelsa State, Nigeria. Primary data was collected using random sampling and evaluated using descriptive statistics, the farm budgeting model, and total factor productivity (TFP) techniques. The study revealed that the net farm income of catfish production was #478,000/ cycle, suggesting a relatively profitable venture with prospects for improved economic potential. The estimated percentage profit margin and benefit–cost ratio were 40.2% and 0.67, respectively. Also, most 68.3% of catfish farmers were sub–optimally productive as their TFP indices were below the optimal scale, attributable to sub–efficient inputs. In addition, constraints of catfish production in the study area include high cost of feeds (95%), inadequate capital (80%), and high cost of pond construction (73.3%); poor market linkages (70%), poor access to modern technologies (65%), high labour cost (51.7%), fish mortality (46.7%), water pollutants (38.3%), seed fingerling scarcity (30%) and inadequate extension contact (25%). The researchers recommended alternative feed sources, practices and technology adoption, financial and credit information, feed, construction materials and equipment subsidy, improved market linkages, extension contacts, access to an adequate water supply, production inputs, technological innovations and cooperative formation.

METHODOLOGY

A qualitative research methodology, which combines observation and face-to-face interviews, was adopted for this study. A qualitative research approach is usually adopted when there are no existing theories or when existing theories fail to adequately explain a given occurrence, as in the case of this research. This paper considers that individuals ascribe varying meanings and interpretations to specific issues depending on their current understanding and perception. In order words, individuals, in this case entrepreneurs (fish farmers), may see issues that affect them based mainly on their social interaction within the environment they have found themselves (Merriam,2002).

The interest of this research is to ascertain what individual catfish farmers' interpretations are in the given context of this study. The data collection technique used in this study entails close interaction between the researcher and the participants, making the data collection very detailed, extensive and informative (Ritchie & Lewis, 2003). The participant in qualitative research is the primary instrument for data collection and analysis and is subject to bias. This study strives to minimize such biases by trying as much as possible not to influence the respondents' opinions but by allowing each respondent to express his opinion in detail.

DATA PRESENTATION AND ANALYSIS

The respondents to this interview are catfish farmers within Aba City in Abia, Nigeria. They were notified of the interview via phone calls and face-to-face information. A total of 20 catfish farmers were interviewed. All accepted the interview except for convenient time with the researcher due to their busy schedule. The research participants selected for this study have an average of over 10 years of experience in catfish farming.

Table 1: Showing Catfish Farmer's Response on Recession Effect on Their Business

QUESTIONS	THEMES WITHIN DATA	ENOUGH DATA EXTRACT TO DEMONSTRATE PREVALENCE OF THE THEME
1. What can you say about catfish business in Aba in particular? 2. What are the challenges that are peculiar to this cat fish business? 3. What would you want the government do for fish farmers in the state to help and assist the growth of the business?	1.Catfish business in Aba is very challenging 2. Absence of constant electricity, high cost of fish feed. No loan from government. 3.We need government assistance through loans or grants	**ANYAKU AQUA FARMS** Here in Abia state most of the civil servants complain that they are being owned salary for months. This affects our business, Meaning that no money is trickling down. Families may desire to eat fish but no enough money to purchase it. Also the insecurity in the state which made government to impose curfew has seriously affected our fish farming business. Most of our customers are Hotels, restaurants and local joints which operate mainly at night. Since the curfew starts 7.PM. There is no night activity and as such we experience low patronage from these customers. The state is so much interested in taxations of all sorts, from local government to state level. This affects our business, most times; the profit you make goes into the multiple taxations imposed on the masses. High cost of fish feed is also a concern to our business. It affects the fish price and brings about constant complaints from the customers. **AKUAKO FARMS LIMITED** This fish farming business is so capital intensive. It is not a business for people that don't have money. Particularly in Aba the business is for persons that have money. The high cost of fish feed is giving our business problem. It keeps rising everyday like every other thing in the Nigerian market without control. If the state or even the federal can come up with loans or even grants to help us. It will help us really well. Our fish production no doubt is actually pushing the economy up. Government people cannot deny it. It is boosting the economy and the agricultural sector. Sometimes when you go to the bank to access loan the stringent conditions they give discourages us again when grants are released, it is politicized. We are on our own. The catfish business is good but we really don't have an enabling environment for it to succeed. Also the ban on catfish export has lingered and has limited us from tapping from export opportunities. Government should please look into it.
		MAKUCHE FARMS NIGERIA In Aba, there is no central market for the cat fish business. The farmers don't speak with one voice. This is a problem for us. When farmers cannot feed their fishes as a result of high cost of feed. They tend to sale at giveaway prices just to recover their production cost. One person is selling 1,500 per 1kg another 1,700 and another 1,900 as the case may be. This is bad for the catfish business in Aba. The recession in the country which trickles down to the states makes people not to afford what they could afford before; this includes catfish and other food items. The government should look into the high cost of feed; it is really disturbing catfish farmers.

		Also the absence of constant electricity is a big challenge especially now that fuel price is on the high side. Most fish farmers find it difficult to change their ponds water which in turn affects the growth of the fishes.
		PHINA D VENTURE FARMS The catfish business in Aba is good because of the numerous restaurants, joints and hotelier outfits present in the town but for challenges like high cost of fish feed which has really dealt the business. Epileptic power supply has been a pain in the neck of fish farmers. There is no steady power supply in this town. We run our cat fish farms with generated power through generators. We buy fuel and also maintain the generating sets. All this costs eats down our profits making it difficult for us to breakeven in the business. The problem of electricity is not just for our state here in Abia, it is a national problem. Nobody seems to be doing anything about it. We also need capital, because the catfish business is capital intensive
		HOBIL INVESTMENT FARMS Catfish business in Aba is quiet challenging. Other farmers in other states are doing better than us. There is so much inconsistency in the states policy making. You wake up today one policy comes up; tomorrow another policy comes up without minding how it affects businesses. The high cost of catfish feed is affects catfish farmers generally, but here in Aba, you struggle with the high cost of fish feed and other challenges posed by the unique nature of the town. The state of infrastructure is bad. The poor state of roads affects our business adversely. The means of transportation of fish feed and fishes itself to customers is very challenging. Most of these farmers do not have pick-up trucks to transport their feeds and catfish to customers. They rely on tricycle popularly known as "keke na pep". These tricyclists seeing that they are the only options that the catfish farmers have double their prizes with the reasons that the roads are in bad conditions and it does not go well with their tricycle. We are on our own in this business. Nothing is being done by the state to help us. We only hear of what they intend to do on the radio and television, but we don't see anything. We are seriously soliciting for government help because our entrepreneurial activity helps to reduce unemployment in the state and in the nation.
		A-Z FARMS The disparity between the rich and the poor in this country is much and it tells in all businesses including our catfish farming. The rich are extremely rich and the poor are extremely poor. The middle class is very few in population and this has a negative effect on the purchasing power of the economy which in turn discourages catfish farmers.

		We also face the problem of unhealthy competition as a result of lack of competent bodies to regulate quality and price of fish products. This is as a result of sabotage by some members to the government. Loans are not easily accessible, as many who want loans cannot get it.The state and federal government does not have adequate security. This is affecting every business including ours. Security is critical to the survival of every business.

PERSONAL OBSERVATION OF RESEARCHER:

The researcher observed that many of the fish farmers in Aba City are not breaking even in their catfish business. They have difficulty purchasing fish feed as they complained that the high feed cost is a big challenge to their business. A visit to some farms showed us they have folded and cannot continue as the business is very capital-intensive. Those with little capital cannot compete favourably in the business, doing the business solely for people with a large amount of capital. It was also observed that the high fuel cost poses a big challenge to their business because they need help to change their pond's water since there is no steady electricity supply. The major challenge farmers face in the Aba metropolitan is the need for roads. This is challenging as many need help transporting feed bags to the farm and fish products to the hotels, restaurants, and joints that constitute their customer base.

CONCLUSION AND RECOMMENDATION

The fish farmers needed to be encouraged to join a fish farmers' association like the Catfish Farmers Association of Nigeria (CAFAN), form cooperatives to improve their business's financial base, and form a quorum for one voice. Raising and training some classes of entrepreneurs with strong entrepreneurial attitudes is also necessary to face the country's turbulent economic challenges. The government should boost the fish farming business since it contributes to economic development.

- The government should encourage catfish farmers with soft loans to assist them since fish farming is seen as a veritable means of livelihood. This should be done at the national and state levels.
- The government should exercise control of fish feed costs by replacing imported ingredients with locally available and economical ingredients with optimal quality.
- The government should step up their game in developing infrastructure, like building good roads to enable easy transportation in the fish business and other agricultural products.
- The national and state governments should consider fish farmers in their policy-making decisions since the government is still experiencing an unstable economy and politics.
- The government should organize seminars, trainings, and workshops from time to time to educate fish farmers on how to run their catfish business efficiently.
- The government needs to look into the electricity problem in the nation as a whole. When fixed at the national level, it will get to the states and benefit all entrepreneurs, including catfish farmers.

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HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANIZATIONAL CULTURE IN STARLINE GROUP OF COMPANY ABA, ABIA STATE, NIGERIA

Otuokere, Ifeanyi C., Dibia, Henry C. and Nwosu, Nnenna F.
Department of Industrial Relations and Personnel Management,
Michael Okpara University of Agriculture, Umudike
Corresponding author: ic.otuokere@mouau.edu.ng

ABSTRACT
Today's organization is predominantly dynamicposing significant opportunities and challenges for corporate practitioners and policymakers. Understanding such dynamism is crucial to pursuing resource management in an organization. The study examined the relationship between human resources management and organizational culture. The population comprised two hundred and twenty (220) staff of Starline group of company, Aba, Abia State. A judgmental sampling technique was used to select respondents from the population knowledgeable enough about the subject matter. The study concluded that Human resource management encompasses issues related to training programmes, recruitment processes, compensation administration, pay structure performance management and personnel development. However, there is always the issue of improper implementation of these practices by the managers in different companies in the country, and these issues, in the long run, will constitute a severe problem for the company's organizational culture. It recommends that the company should continue to uphold their training programme since it will enhance organizational culture in Starline Group of Company in Aba, Abia State; the company should also adhere strictly to the Recruitment process of the company since this will enhance organizational culture in Starline Group of Company in Aba, Abia State, the company should as a matter of urgency chose the right person that will head compensation administration department in the company to be able to handle compensation administration effectively.
Keywords: Human Resource Management, Organizational Culture.

INTRODUCTION
The history of human resource management can be traced to the early 1900s when workers' duties in the company became less labour-intensive and more worked with machinery. Gituma and Beyene (2018) defined human resource management as a managerial orientation that ensures that human resources are utilized to deliver value to the organization by giving it competitive advantages, thus leading to the attainment of organizational goals, vision and mission (Collins, 2021). Also, today's organization is predominantly dynamic, posing significant opportunities and challenges to corporate practitioners and policymakers. Understanding such dynamism is crucial to pursuing human resource management in an organization. Hence, the importance of human resource management in organizational culture cannot be overemphasized. Human resource management has an important role to play in organizational culture because it involves the people who work for the organization, who embrace and develop particular cultures within the organization; hence, any desired change to the culture of the organization has to be made through the people and by the people (Khan, & Abdullah, 2019). This implies that human resource management and organizational culture are related, and treating the word like this will be appropriate. Human resource management policies, which are influenced by organizational culture, also significantly impact employee performance. Human resource management is also critical because when an organization hires personnel that blend with their culture, these will enhance shared social knowledge between employees and organizational goals; such shared knowledge guides employees in making the right decision when confronted with usual situations (Khan & Abdullah, 2019).
It is assumed that a symbiotic relationship exists between human resource management and organizational culture, wherein four human resource policy areas, staffing, training, compensation, and evaluation of employees, have significant effects on organizational culture (Anwar, 2017). This symbiotic relationship is defined by management time constraints, experience, and market characteristics (Anwar, 2017).
Also, most human resource management practices experienced in organizations in Nigeria and the world include but are not limited to training programmes, recruitment processes, compensation administration and pay structures. The relationship between these human resources practices and organizational culture is such that when employees understand and internalize the organizational culture, this enables employees to

choose the strategy and behaviour that fit their personality as well as the main routines of the organization's activities (Mousa, & Othman, 2020). Abdullah & Abdul (2015) concur that organizational performance is better in companies with congruency between culture and human resources management. As human resource management is responsible for recognizing the competitive advantages in corporate culture, an organization can differentiate itself from its competitors by attracting many excellent candidates and selling itself as the best employer.

Hence, it is assumed that human resource management positively impacts organizational culture. Organizational culture is the basic pattern of shared assumptions, values, and beliefs considered the correct way of thinking about and acting on the organization's problems and opportunities. This study examines the relationship between human resource management practices and organizational culture in Starline Group of Company in Aba, Abia State.

Human resource management deals with issues related to training programmes, recruitment processes, compensation administration, pay structure performance management and personnel development. However, there is always the issue of improper implementation of these practices by the managers in different companies in the country, and these issues, in the long run, will constitute a severe problem for the company's organizational culture (Anwar &Balcioglu, 2016).

In addition, human resources management involves the management of an organization's most valued assets, such as people working in the organization who individually and collectively contribute to the achievement of the objectives of their companies. Impartiality and meritocracy in such tasks as training programmes, recruitment process, compensation administration, pay structure performance management and personnel development have proven to be an intractable problem of managerial efficiency in Nigerian companies, which has also constituted a serious problem to the organizational culture of difference companies in the country (Abdullah & Othman, 2016)

Finally, most researchers have researched related studies on the topic under review over the years. These include Govand and Nabaz (2021), conducted a study on the impact of Human resource management practice on Organizational performance, Matthew &Kajo (2021), examines challenges posed by individuals, governments and unions on human resource management in Nigeria, Adenuga, Amos and Asikhia, (2020) investigate the relationship between human resources management (HRM) and non-financial performance (NFP), Izuogu (2015), examined the impact of organizational culture in recruitment and selection practices in oil and gas construction industry in Nigeria, Osibanjo and Adeniji (2013), conducted a study on the impact of organizational culture on human resource practices in some selected Nigerian private universities, Nyameh (2013), investigated empirically the impact of organizational culture on human resource management using the CUBS project (MSH/AFRICARE) in Nigeria as the case study, Nzeadibe (2012), focused on the impact of organizational culture on human resource management practices a focus on Dangote group. Nathaniel (2012) examined the cultural values and knowledge management approach within Nigeria's oil and gas industry. It should be noted that these researchers have yet to attempt to break down human resource management into training programmes, recruitment processes, compensation administration, pay structure performance management and personnel development. Hence, the study will examine the relationship between these human resources management practices and organizational culture in Starline Group of Company in Aba, Abia State.

LITERATURE REVIEW

Human Resource Management

Human resource management (HRM) includes training programmes, recruitment processes, compensation administration, pay structure performance management and personnel development, worker relations, health care, employee satisfaction, and provision of employee services. It includes policies and practices set to improve organizational efficiency, engagement of employees and work quality (Carnevale&Hatak, 2020). Human resources management also included compensation, employee relations, manpower planning, learning and development, and performance management. Human resource management is a multidisciplinary organizational function that draws theories and ideas from various fields, such as management, psychology, sociology and economics (Yusoff et al., 2020). It includes administrative activities such as planning, recruitment, selection, orientation, training, appraisal motivation and remuneration (Vincent et al., 2020). Sum up human resource management by five key concepts: motivating, disciplining, managing conflict, staffing and training.

Similarly, Storey (1992) describes the five functional areas of human resource management as staffing, rewards, employee development, employee maintenance, and employee relations. In addition, human resource management may be viewed as a distinctive approach to employment management that seeks to

achieve competitive advantage through strategy deployment of a highly committed and capable workforce using an integrated array of cultural, structural and personal techniques (Vincent et al., 2020). This explains human resource dynamics and strategic importance as organizations' most valued assets (Abdullah & Othman, 2019).

Organizational Culture

Organizational culture has proven to be vast because of the lack of a single definition generally accepted by all organizational culture literature. One of the issues involving culture is that it is defined in terms of its causes and effects (Guest et al., 2020). Organizational culture is a complex network of values and norms that guides an individual's behaviours. It involves a set of beliefs, values, assumptions and experiences acquired through learning, socializing and sharing by members of the social units, such as people in the organization (Guest et al., 2020). Almost all the definitions of culture emphasize the organizational assumptions developed, nurtured and mentored consciously or unconsciously over an organization's life cycle; these include experiences, norms, values, philosophy and rituals that hold the organization together, its portrait, self-image, inner workings, and interaction with the outside environment where some of the values are kept in written form. In contrast, others are unwritten but adhere strictly (Collins & McNulty, 2020). An organization's culture is sometimes dynamic, particularly after conducting a SWOT analysis; the true essence is revealed - organizational culture is called corporate culture (Collins & McNulty, 2020).

Magrizos and Roumpi (2020) summarize organizational culture as a collective process of the mind that differentiates the members of one group from the other. Thus, we can deduce from the above definitions that organizational culture could keep employees in line and acclimate them towards organizational objectives. Organizational culture is also conceptualized as shared beliefs and values that help shape employees' behaviour patterns (Magrizos&Roumpi, 2020). Wood & Bischoff (2020) also see organizational culture as the drive that recognizes the efforts and contributions of the organizational members and provides a holistic understanding of what and how to be achieved, how goals are interrelated, and how each employee could attain goals. Wood and Bischoff (2020) argue that we can describe "how" a group constructs its environment and which behaviour patterns are discernible in how it does things. Organizational culture is a process that the organizational founders, top management and employees learn, socialize and adopt over time. It selects the best culture that suits the organization's objectives and can be readily accepted by the wider environment (Wood & Bischoff, 2020). Organizational culture is the normative glue that holds an organization together. More comprehensively, it argued that culture, as values and behaviours believed to lead to success, are thus taught to new members.

Vincent et al. (2020) stated that organizational culture is a management tool that helps in work rationalization and efficiency thinking: an attempt to develop control mechanisms not based on compulsion or direction. Vincent et al. (2020) argue that workers strive to command themselves or each other. The manager's task is the creation of a culture and its manipulation. The power of cultural theories is seen mainly in fields in which direct control and guidance mechanisms are difficult or impossible to maintain. Anwar and Shukur (2015) sum up the matter by stating that cultures are historically developed, socially maintained and individually interpreted. Every culture, however, has an in-built propensity to merge behaviour, which happens by creating standard norms and a shared social identity; such absolute behaviour within a given organization is called corporate culture (Anwar &Shukur, 2015).

These cultural values and human resource development programmes are consistent with the strategies chosen by organizations that have led to successful organizations. The organizational culture is outlined in Anwar &Shukur (2015) as an overall phenomenon of the organization, such as natural settings, the rites and rituals, climate, values and programmes of the company, e.g. performance management, training and development, recruitment and selection. According to Olawale and Garwe (2010), culture is deeply associated with values and beliefs shared by organizational personnel.

Organizational culture relates the employees to the Organization's values, norms, stories, beliefs and principles and incorporates these assumptions into them as activity and behavioural standards. Olawale and Garwe (2010) positioned organizational culture as the core of an organization's activities, which has an aggregate impact on its overall effectiveness and the quality of its products and services. Olawale and Garwe (2010) defined organizational culture as a dynamic force that is revolving, engaging, and interactive, and it is shaped by the employees' and management's gestures, behaviours, and attitudes. Organizational culture is the basic pattern of shared assumptions, values, and beliefs considered the correct way of thinking about and acting on the organization's problems and opportunities. It is what is important and unimportant in the organization. It is often thought of as an organization's DNA- i.e., invisible to the naked eye, yet a powerful template that shapes what happens in the workplace. Hence why, Vanlalhriati

and Singh (2015) argue that culture begins with leadership and is passed on to the organizational members; it is seen as a set of forces that shape and determine human behaviour.

An organization's culture is brought about as a result of different factors, some of which include the influences of national culture, previous events in the organization, the different personalities and the socialization individual members experienced as a result of past educational and work settings. It includes the assumptions, values and beliefs of the organization.

Critical Practices of Human Resource Management

(a). Organizational Development:

It involves stimulating, planning and implementing programs to improve the organization's effectiveness in finding risk and developing change (Armstrong, 2019).

(b). Employee and Labour Relations:

Improving the quality of the employment relationship by creating a climate of trust and developing a more positive psychological contract. Managing and maintaining formal and informal relationships with trade unions and their members. Encourage employee involvement and participation, thus giving them a voice, sharing information with employees, and consulting them on matters of mutual interest (Armstrong, 2019).

(c). Recruitment and Selections:

Applicant recruitment and employee selection form a significant part of an organization's overall resourcing activities, identifying the number and securing the type of people needed for the organization to service. Recruitment activities must be responsive to the increasingly competitive market to secure qualified and capable recruits at all levels. To be effective, these initiatives need to analyze and identify the need for and availability of both numbers and levels of skills and competence and formulate and implement plans to meet those requirements (Armstrong, 2019).

(d). Performance Management:

Developing and designing processes for capturing and sharing knowledge to enhance organizational learning and performance. Getting better results from the organization's team and individuals by increasing and managing performance within agreed frameworks of objectives and competence requirements, assessing and improving performance, and identifying and satisfying learning and development needs (Armstrong, 2019).

(e). Training and Development:

At the organizational level, a successful human resource management development program entails designing and running training and development programs that prepare individuals to undertake a higher level of work to provide the possibility of performance change. In those settings, human resource development is the framework that focuses on the organization's competencies at the first stage, training and then developing the employee through education to satisfy the organization's long-term needs and the individual's career goals and employee value to their present and future employers. This human resource activity provides learning and development opportunities to increase managers' capacity to significantly contribute to achieving organizational goals (Armstrong, 2019).

(f). Compensation and Reward Management:

Among core human resources activities are pay systems, contingent pay, non-financial rewards and benefits administration management. These activities correlate with the human resource objectives of developing pay structures and systems that are equitable, fair and transparent, relating financial rewards to results, competence contributions, skill and effort. Moreover, it provides employees with non-financial rewards such as recognition, increased responsibility, and the opportunity to achieve and grow (Armstrong, 2019).

Theoretical Review

Herzberg Two-Factor Theory

Herzberg's two-factor theory was propounded by Frederick Herzberg in 1959. Herzberg's two-factor theory states that employees are motivated by internal values rather than values that are external to the work. In other words, motivation is internally generated and propelled by variables intrinsic to the work, which Herzberg called 'motivators'. These intrinsic variables include achievement, recognition, the work itself, responsibility, advancement, and growth. Conversely, certain factors cause dissatisfying experiences for employees, mainly resulting from non-job-related variables (extrinsic). Herzberg referred to these variables as 'hygiene' factors, which, although they do not motivate employees, must be present in the workplace to make employees happy (Kossek et al., 2016).This theory states that job satisfaction and dissatisfaction are

a product of motivation and hygiene, respectively. Motivation is an inner force that drives individuals to attain personal and organizational goals. Motivational factors are those aspects of the job that make people want to perform and provide people with satisfaction. Hygiene factors include aspects of the working environment like working conditions, interpersonal matters, and organizational policies. Therefore, factors that relate to job satisfaction are called satisfiers or motivators (Kossek et al., 2016).According to Morcos (2018), Herzberg's two-factor theory is an essential frame of reference for managers who want to understand job satisfaction and related job performance issues. Morcos (2018) asserts that Herzberg's two-factor theory is a helpful reminder that there are two essential aspects of all jobs: what people do in terms of job tasks (job content) and the work setting in which they do them (job context). Murat, Zwingina, and Opusunju (2017) suggest that managers should always attempt to eliminate poor hygiene sources of job dissatisfaction in the workplace and ensure building satisfier factors into job content to maximize opportunities for job satisfaction. This theory is relevant and significant to this study in that it recognizes that employees have two categories of needs that operate in them and that both should be addressed (Murat et al., 2017).

Resource's dependency theory

Resource dependency theory was propounded by Emerson in 1962. Resource dependency theory states that organizations can obtain and efficiently utilize rare resources to maintain a competitive advantage in the marketplace. The capability to utilize one's resources (financial, technical, and labour) and obtain further from the external atmosphere was one of the parts of worry in numerous organizations. The more organizations could harness resources, the more competitive they became. Therefore, resources were seen as the essence of organizational power (Mutheu et al., 2017). However, overdependence on external resources appeared to be risky due to the uncertainties that the organization cannot control. Concerning useful labour, the emphasis shifted to seeing employees as scarce resources that should be acquired effectively, utilized, developed and retained (Mutheu et al., 2017).

METHODOLOGY

The study adopted a cross-sectional survey design, which involved collecting data from the phenomenon at the time of the study and allowed conclusions to be drawn. The cross-survey research design also allowed the researcher to describe existing conditions through the collection of primary data. The study's primary data were obtained through a questionnaire from the 220 Starline company staff in Abia, Abia State. The researcher will make use of 5-point Likert scale questions. The stated objectives were analyzed using descriptive statistics, while the hypotheses were analyzed with multiple regressions. Multiple regression was used to ascertain the causes and effects of the relationship between variables in the study.

Model Specification

For Hypothesis1 to 4, we employ a multiple regression model, thus;

$Y = F(X1, X2, X3, X4)$ ………………………………….………………………….. 3.1

$OC = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + ei$ …………………………………………3.2

Where;

Y = Organizational culture

X1 = Training programme,

X2= Recruitment process

X3 = Compensation administration

X4 = Pay structure

β0 = intercept

β1- β4 = parameters estimate

ei = error term

RESULT AND DISCUSSIONS

Table 1: Distribution of Socioeconomic characteristics of the respondents

Variables	Frequency	Percentage
Age		
Less than 21years	15	12
21 – 30	45	35
31 – 40	43	33
41 – 50	20	15
Above 50	7	5
Total	**130**	**100.**
Gender		
Male	87	67
Female	43	33
Total	**130**	**100**
Marital Status		
Married	68	52
Single	57	44
Divorced	5	4
Total	**130**	**100**
Qualification		
FSLC	10	8
SSCE	25	19
ND/NCE	34	26
B.Sc/HND	55	42
M.Sc/MBA	6	7
Total	**130**	**100**
Monthly Income		
0 > 30000	5	4
31000 – 60000	78	60
61000– 90000	38	29
>100000 – 130000	7	5
130000 and above	2	1
Total	**130**	**100**
Number of Years		
< 5years	6	7
6 -10years	47	36
11–15years	45	35
16-20years	27	21
Above 20years	5	4
Total	**130**	**100**

Source: Field Survey, 2023

As shown in the age row in table 1 above, most of the respondents 35% fell into the 21 – 30 age brackets, followed by 33% of the respondents who fell between 31– 40 of age, the least were 5% of the respondents who was at above 50. This implies that majority of the respondent were young people. The gender row from table 1 revealed that, majority of the respondents constituting 52% were male; as against 48% who

were female staff of Starline group of company, Aba, Abia State. As shown in marital status row in Table 1 above, majority of the respondents constituting 52% were married; as against 44% of the respondents who were single and the least were those who were divorced constituting 4%. Table 1 further reveals the level of education of the staff of Ministry of Works in Umuahia, Abia State. From the frequency, most of the respondents constituting 42% of the respondents were B.Sc/HND holders, followed by ND/NCE holders with 26% while the least were FSLC holders constituting 8%. The table above further explained that, most of the respondents (60%) received monthly salary of between 31000 –60000, followed by 29% of the respondents who received monthly salary of ₦61,000- 90,000. The least were those who had not received monthly income 130000 and above representing 1% of the sample. The last row in table 4.2 explained the number of years they have worked as staff of Starline group of company, Aba, Abia State. As stated in the frequency, most of the respondents constituting 36 % have worked as staff of Starline group of company, Aba, Abia State between 6 -10years followed by those who have worked as staff of Starline group of company, Aba, Abia State between 11 -13years years with 35% and the least were those who have worked staff of Starline group of company, Aba, Abia State above years with 4%.

Research Questions 1: To what extent does training programme affect organizational culture in Starline Group of Company in Aba, Abia State?

Table 2: Participants responses on the extent of training programme on organizational culture in Starline Group of Company in Aba, Abia State

Training programme affect organizational culture	SA	A	N	D	SD	Total	$\bar{X}$	Decision
Effective programme management affect organizational culture	500	300	90	20	5	915	4.58	Accepted
Assessment of employee learning need affect organizational culture	475	320	90	20	5	910	4.55	Accepted
Alignment of training with objective affect organizational culture	450	340	81	26	5	902	4.51	Accepted
Training measurement affect organizational culture	460	332	81	26	5	904	4.52	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data on table 2 indicated the respondents' responses on effect of training programme on organizational culture in Starline Group of Company in Aba, Abia State. The result revealed that all the items were above the acceptance bench mark of 3.00 which shows that all the items were accepted by the respondents that affect training programme on organizational culture in Starline Group of Company in Aba, Abia State

Research Questions 2: What are the effect of recruitment process on organizational culture in Starline Group of Company in Aba, Abia State?

Table 3: Participants responses on the effect of recruitment process on organizational culture in Starline Group of Company in Aba, Abia State.

Effect of recruitment process on organizational culture	SA	A	N	D	SD	Total	$\bar{X}$	Decision
Publication of vacancy affect organizational culture	350	120	60	10	5	545	4.19	Accepted
Screening of applicants affect organizational culture	400	140	30	6	2	578	4.55	Accepted
Interviewing short-listed applicant with objective affect organizational culture	500	80	15	6	2	603	4.63	Accepted
Selection recommendation affect organizational culture	425	136	27	2	1	591	4.55	Accepted

Review and approval of human resources management affect organizational culture	375	160	30	6	2	573	4.41	Accepted
Appointment affect organizational culture	400	140	33	4	2	579	4.45	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data on table 3 indicated the respondents' responses on effect of recruitment process on organizational culture in Starline Group of Company in Aba, Abia State. The result revealed that all the items were above the acceptance bench mark of 3.00 which shows that all the items were accepted by the respondents that recruitment process affect organizational culture in Starline Group of Company in Aba, Abia State.

Research Questions 3: How does compensation administration affect organizational culture in Starline Group of Company in Aba, Abia State?

Table 4: Participants responses on compensation administration on organizational culture in Starline Group of Company in Aba, Abia State

Effect of compensation administration on organizational culture	SA	A	N	D	SD	Total	$\bar{X}$	Decision
Basic wages affect organizational culture	350	200	30	14	3	597	4.59	Accepted
Dearness allowance affect organizational culture	425	140	15	6	2	588	4.52	Accepted
House rent allowance affect organizational culture	500	80	15	6	2	603	4.63	Accepted
Other allowance affect organizational culture	400	120	30	12	4	566	4.35	Accepted
Incentive affect organizational culture	375	160	30	6	2	573	4.41	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data on table 4 indicated the respondents' responses on effect of compensation administration on organizational culture in Starline Group of Company in Aba, Abia State. The result revealed that all the items were above the acceptance bench mark of 3.00 which shows that all the items were accepted by the respondents that compensation administration affect organizational culture in Starline Group of Company in Aba, Abia State.

Research Questions 4: What are the effect of pay structure on organizational culture in Starline Group of Company in Aba, Abia State?

Table 4: Participants responses on the effect of pay structure on organizational culture in Starline Group of Company in Aba, Abia State.

Effect of pay structure on organizational culture	SA	A	N	D	SD	Total	$\bar{X}$	Decision
Basic salary affect organizational culture	325	220	30	14	3	619	4.76	Accepted
House rent allowance affect organizational culture	410	200	15	6	2	605	4.65	Accepted
Special allowance affect organizational culture	500	80	15	6	2	603	4.63	Accepted
Leave allowance affect organizational culture	400	120	30	12	4	566	4.35	Accepted
Medical allowance affect organizational culture	375	160	30	6	2	573	4.41	Accepted

Source: Field survey, 2023: Decision rule: ≥ 3.0 = Accepted, < 3.0 = Rejected

The data on table 4.3 indicated the respondents' responses on effect of pay structure on organizational culture in Starline Group of Company in Aba, Abia State. The result revealed that all the items were above

the acceptance bench mark of 3.00 which shows that all the items were accepted by the respondents that pay structure affect organizational culture in Starline Group of Company in Aba, Abia State.

Multiple Regression analyzed for the Study

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	X4, X1, X3, X2[b]	.	Enter

a. Dependent Variable: Y
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.654[a]	.625	.6094	7.05003

a. Predictors: (Constant), X4, X1, X3, X2

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	113.705	4	28.426	.4.934	.0132[b]
	Residual	795.247	138	5.761		
	Total	908.952	142			

a. Dependent Variable: Y
b. Predictors: (Constant), X4, X1, X3, X2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.835	0.613		2.995	.158
	X1	1.652	0.226	.127	7.309	.002
	X2	1.496	0.455	.281	3.280	.019
	X3	1.982	1.947	.251	1.017	.224
	X4	1.199	1.563	.036	0.128	.900

a. Dependent Variable: Y

From the regression results as shown in table 4.8, the adjusted R-squared of 0..6094 revealed that approximately 61% of the total variations in the dependent variable (organizational culture (Y) was accounted for by the explanatory variable (training programme, recruitment process, compensation administration and pay structure while the remaining 39% was due to the error term.) The constant (C) implies that *ceteris paribus* (holding the explanatory variables constant), organizational culture (Y) will be increasing by 1.835 units.

The result show that a unit increase in training programme (X1) holding other variables constant lead to 1.652 unit increase in organizational culture (Y).. Also, a unit increase in recruitment process (X_2) holding other variables constant lead to 1.496 unit increase in organizational culture. A unit increase in compensation administration (X3) holding other variables constant lead to 1.982 units increase organizational culture and finally. A unit increase in pay structure (X4) holding other variables constant lead to 1.199 units increase in organizational culture

Test of hypothesis 1
$H0_1$: Training programme has no significant effect on organizational culture in Starline Group of Company in Aba, Abia State.

Variable	Coefficient	t-statistic	Prob.
X_1	1.652	7.309	0.002
T-tabulated = 1.76			

Source: Extracted from regression result table

The table above indicates that the coefficient p-value of the training programmeis 1.652 while the probability value (p-value) is 0.002 and the t-statistic value is 7.309 all at 5% level of significance. Since the coefficient value is positive while the p-value is less than 0.05 at 5% level of significance and the t-statistic value is greater than the T-tabulated value of 1.76, the alternative hypothesis one is therefore accepted. This implies that training programme has positive and significant effect on organizational culture.

Test of hypothesis 2
$H0_2$: Recruitment process has no significant effect on organizational culture in Starline Group of Company in Aba, Abia State.

Variable	Coefficient	t-statistic	Prob.
X_2	1.496	3.280	.019
T-tabulated = 1.76			

Source: Extracted from regression result table

The table above indicates that the coefficient p-value of the recruitment process is 1.496 while the probability value (p-value) is 0. 019 and the t-statistic value is 3.280 all at 5% level of significance. Since the coefficient value is positive while the p-value is less than 0.05 at 5% level of significance and the t-statistic value is greater than the T-tabulated value of 1.76, the alternative hypothesis one is therefore accepted. This implies that the recruitment process has positive and significant effect on organizational culture.

Test of hypothesis 3
$H0_3$: Compensation administration has no significant effect on organizational culture in Starline Group of Company in Aba, Abia State.

Variable	Coefficient	t-statistic	Prob.
X_3	1.982	1.017	. .224
T-tabulated = 1.76			

Source: Extracted from regression result table

The table above indicates that the coefficient p-value of the compensation administration is 1.982 while the probability value (p-value) is 0.224 and the t-statistic value is 1.017 all at 5% level of significance. Since the coefficient value is positive while the p-value is greater than 0.05 at 5% level of significance and the t-statistic value is less than the T-tabulated value of 1.76, the alternative hypothesis one is therefore accepted. This implies that compensation administration has positive and insignificant effect on organizational culture.

Test of hypothesis 4
$H0_4$:Pay structure has no significant effect on organizational culture in Starline Group of Company in Aba, Abia State.

Variable	Coefficient	t-statistic	Prob.
X_4	1.199	0.128	0.900
T-tabulated = 1.76			

Source: Extracted from regression result table

The table above indicates that the coefficient p-value of the pay structure is 1.199 while the probability value (p-value) is 0.900 and the t-statistic value is 0.128 all at 5% level of significance. Since the coefficient value is positive while the p-value is greater than 0.05 at 5% level of significance and the t-statistic value is less than the T-tabulated value of 1.76, the alternative hypothesis one is therefore accepted. This implies that pay structure has positive and insignificant effect on organizational culture in Starline Group of Company in Aba, Abia State.

CONCLUSION AND RECOMMENDATIONS

Human resource management is a word that deals with issues related to training programmes, recruitment processes, compensation administration, pay structure performance management and personnel development. However, there is always the issue of improper implementation of these practices by the managers in different companies in the country, and these issues, in the long run, will constitute a severe problem for the company's organizational culture. In addition, human resources management involves the management of an organization's most valued assets, such as people working in the organization who individually and collectively contribute to the achievement of the objectives of their companies. In conclusion, human resources management enhanced organizational culture. We therefore recommend that

1. The study company should continue to uphold their training programme since it will enhance organizational culture in Starline Group of Company in Aba, Abia State.
2. The study company should also adhere strictly to the Recruitment process of the company since this will enhance the organizational culture in Starline Group of Company in Aba, Abia State.
3. As a matter of urgency, the study company should choose the right person to head the compensation administration department in the company to handle compensation administration effectively.
4. The company should also review its pay structure. This will motivate and enhance the welfare of employees.

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