



BAYERO BUSINESS REVIEW

**A Journal of Management Sciences
(BBR)**

**DEPARTMENT OF BUSINESS MANAGEMENT
BAYERO UNIVERSITY KANO, NIGERIA**

**NOVEMBER, 2023
VOLUME 7, NO. 2**

ISSN: 0189-4684

Risk Governance and Organizational Performance of Telecommunications Firms in Nigeria

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ABSTRACT

The study focuses on risk governance and organisational performance of telecommunication firms in Nigeria. A Cross-sectional survey is adopted and data are collected from 372 respondents from the Nigerian telecommunication firms using a google survey questionnaire. Multiple linear regression method of data analysis is employed to test the research hypotheses. The study finds that risk management strategy has a significant effect on organisational performance. The result also shows that accountability has no significant effect on organisational performance. Furthermore, the result further discloses that compliance has a significant effect on organisational performance of telecommunication firms in Nigeria. It is concluded that risk governance measures are important ingredients in managing vulnerabilities that telecommunication firms should have to address to achieve their set goals and objectives. The study therefore, recommends that more risk management strategies is formulated to help mitigate risk that would affect performance as a result of technological advancement, a proper check and balance mechanism should be place for board members and management to be effective in carrying out their job responsibilities, and total compliance team should be in place to avoid litigations and ensure optimal efficiency.

Keywords: Risk Governance, Risk Management Strategy, Accountability, Compliance, Organisational Performance, Telecommunication Firms

1. Introduction

The effectiveness and efficiency with which an organization meets its objectives following established timelines is a measure of its performance (Jaber, 2020). An organization's divisions must be evaluated together to provide an accurate picture of its overall performance. Productivity, quality, and uniformity are three things that are highly valued by businesses, and one of the most significant non-financial variables in an organization's effectiveness is the action of its personnel

(Ling *et al.*, 2020). The generation of value plays a pivotal role in enhancing performance, serving as a fundamental foundation for a profitable and enduring business. The creation of value by customers contributes to the consumption of goods and services, while employees' value creation enhances overall productivity. Simultaneously, shareholders' value creation leads to an increase in stock price and secures future investment capital. In the context of competition and escalating

performance expectations, prioritizing sustainable development over value creation as a channel to the public, customers, and employees is imperative (Ciora & Robu, 2010). The availability of resources to the organization and its survival depends on the value that can be generated by using the donated resources being at least as high as the value anticipated by the individuals who provide the resources (Carton, 2004). Evaluating a company's achievement of its goals is now essential in modern business operations. To ensure accurate assessments, companies need to adapt and enhance their measurement methods to consider the specific context in which they operate.

Risk governance describes the organizations, norms, procedures, and systems that are used to make and carry out risk-related decisions. Its analysis and formulation of risk management measures to prevent and/or lessen the human and financial costs associated with catastrophes can have both normative and positive effects (Ortwin, 2008). Risk governance is the application of actions, procedures, established practices, and organizational frameworks to exercise authority, make decisions, and execute them. The concept of enterprise risk governance has gained widespread use, particularly in recent years, encompassing the comprehension,

evaluation, management, and communication of risks (Terje & Ortwin, 2020). Risk governance has laid more emphasis on the application of good governance principles to the process of discovering, evaluating, and reporting hazards (International Finance Corporation, 2015). It involves establishing rules and processes to make and execute choices involving risk, with an emphasis on responsibility, participation, and openness. Telecommunication firms may benefit from risk governance strategy if the board of directors and chief executive officers take their roles as risk stewards seriously. A strong enterprise risk governance framework ensures that everyone in the organization is aware of the firm's risk appetite and how certain given tasks are to be completed to achieve the organization's objectives (Kakiya, 2021).

Similarly, boards should be held accountable for risk supervision as part of risk governance, which is one of their key objectives. When it comes to running a safe business organisation, enterprise risk governance is the framework that holds everything together. It will be an expression of the company's risk culture and an effort to preserve and develop that culture. Board members and senior management must adopt risk management practices for meaningful risk governance

implementation to align corporate goals improve organisational performance (Viscelli *et al.*, 2016). Hence, risk governance policies guarantee that a company has established the necessary processes and internal controls to prevent loss, keep data secured, and increase efficiency.

For telecommunications firms to recognize and reduce risks that could have an impact on their operations, risk governance is crucial. Natural disasters, cyber-attacks, regulatory changes, technology advancements, and competition from other providers are some of the most frequent dangers that telecom companies have to deal with. Given the way the telecommunications sector is important to Nigeria's economy and how it facilitates economic activities in the 21st C through information and communications technology, such as e-banking, e-commerce, e-payment, e-education, e-health, and e-agriculture, businesses operating in this sector are likely to become more competitive and perform even better (Chukwudifu & Olori, 2020). Essentially, this means that Nigerian telecommunication companies need to be ready to assess their risk management strategy, accountability, and compliance with regulations because, these factors might undermine their capacity for

survival, resulting in lost income, closures, and unemployment.

In this study, two operational measures of risk governance (risk management strategy, accountability, compliance) and organisational performance which leads to testing of the following hypotheses stated in null forms:

H01: There is no significant relationship between risk management strategy and organisational performance.

H02: There is no significant relationship between accountability and organisational performance.

H03: There is no significant relationship between compliance and organisational performance.

2.0 Review of Related Literatures

2.1 Conceptual Review

2.1.1 Concept of Risk Governance

According to Ortwin (2020), risk governance pertains to a collection of academic thoughts and principles aimed at making collective decisions in situations where the outcomes of events or actions are uncertain. Similarly, Marjolein and Ortwin (2011) suggest that risk governance entails applying the fundamental principles of governance to the specific context of decision-making related to risks. Moreso, the task of managing risks and building

internal control systems for their detection, measurement, and management is carried out by a company's board of directors and management (Cavezaali & Gardenal, 2015). A strong risk governance framework ensures that everyone in the organization is aware of the firm's risk appetite and how given tasks are to be completed (Kakiya, 2021). It involves establishing rules and processes to make and execute choices involving risk, with an emphasis on responsibility, participation, and openness. The organization may benefit from enterprise risk management if the board of directors and chief executive officers take their roles as risk stewards seriously.

2.1.2 Risk Management Strategy

According to Stephen and Daniel (2013), risk management strategy mirrors an organization's approach to handling various types of risks, typically within specific risk categories. This strategy encompasses the establishment of policies, procedures, and standards designed for the identification, assessment, response, monitoring, and governance of risks. In addition to this, it reflects the governance decisions of the organization regarding risk assumptions, constraints, priorities, tolerance, and acceptance criteria. In centralized governance models, the risk management strategy may also specify the practices and methodologies for risk assessment,

response, and monitoring to be employed across mission, business, and information system tiers. Significantly, articulating and communicating the organizational risk tolerance stands out as a crucial aspect of the risk management strategy, as these tolerance levels exert influence over all elements of risk management (Ross *et al.*, 2021).

2.1.3 Concept of Accountability

Han and Hong's (2019) hold that, accountability is the extent to which an individual's actions are examined and evaluated by others, with substantial rewards and penalties associated with these assessments. In the alternative, accountability is the means by which public agencies and their staff manage the expectations that arise from both inside and outside the organization (Romzek & Dubnick, 1987). In order to successfully handle expectations that come from legal entities, citizens, top executives, or organizational members, agencies should set up a variety of accountability mechanisms. The idea of accountability is taking ownership of one's responsibility for acting morally and honestly toward other people. In the context of corporations, accountability includes a company's responsibility for its actions evaluated based performance (Kenton & Kindness, 2023).

2.1.4 Concept of Regulatory Compliance

Snell (2004), describes compliance as a traditional organizational outcome involving adherence or obedience to the law and related regulations. Regulatory authorities not only mandate organizations to fulfil regulatory obligations (Parker, 2002), but they also demands that organizations operate in accordance with anticipated norms and values, as scrutinized by stakeholders and the community (Interligi, 2010). ISO (2014), defines compliance as the fulfilment of all the organization's compliance obligations. Checkel (1999) proposes that, compliance refers to the degree to which agents adhere to and fulfil the prescriptions outlined in rules, standards and norms. Neyer and Zürn (2001) point out that poorly written policies and a convoluted policy-making process were frequently the root causes of factors leading to non-compliance.

2.1.5 Concept of Organizational Performance

Performance is a reflection of a company's evolution over time, helping to achieve organizational goals and objectives and winning over investors (Jassam, 2021). It entails making efficient use of the resources at hand to produce the intended outcomes. Organizational performance measures how well a company uses its resources, people, money, and knowledge to successfully

compete in a particular market, which has become a major problem for modern businesses (Aduloju *et al.*, 2023). An organization's performance has a significant impact on both its short- and long-term survival (Singh *et al.*, 2016). In determining how well a company provides value to its stakeholders, it is imperative to evaluate its performance. The organization's performance in accordance to its objectives is measured using the set key performance indicators which includes profitability, market share, customer satisfaction and employee satisfaction. The reason for this is that, improving an organization's performance requires constant assessment of its activities, identification of areas in need of development, and application of solutions to increase the organization's overall effectiveness (Anderson & Trujillo, 2022).

Accounting Literature Perspective:

Scholars that study accounting use the information included in a company's financial statements and metrics to determine organisational performance. In order to make meaningful comparisons between businesses throughout time, it is essential that their financial statements from the past and the present reflect the business fairly and consistently (Carton, 2004). The accounting's view of organisational performance, is predicated

on the influence that administrative choices had in the past and expressly excludes the anticipated future implications. Lastly, the accounting profession crafts its standards to educate all consumers of financial accounts, including equity providers, creditors, and regulatory agencies, so the resulting picture of performance is comprehensive (Demeke & Tao, 2020).

Entrepreneurship Perspective: One of the viewpoints of organisational performance is the entrepreneur's founding aims, which are also the organization's own. Entrepreneurship scholars also clearly include the viewpoints of important groups, such as venture capitalists and family business owners, when assessing a company's success. It is safe to say that, the entrepreneurial organisational performance has many moving parts (Demeke & Tao, 2020).

2.2 Theoretical review

2.2.1 Agency Theory

Agency theory is propounded by Jensen and Meckling (1976). According to this theory, one party (the agent) acts on behalf of another (the principal) in handling business dealings. The principle gives the agent some powers on important matters within the scope of their agency relationship. The idea clarifies questions of responsibility and accountability between principals and agents. Different degrees of

risk between an agent and a principal are discussed in agency theory. While the agent makes the choices, he or she takes on almost minimal risk since the principal is responsible for any potential losses (Pouryousefi & Frooman, 2017). This happens when shareholders allow a company to utilize their money covertly. The agent may be more or less willing than the principal, to take calculated risks as a result of the unequal distribution of risks. Eisenhardt's (1985), theory of agency in the context of organizations describes the best way to set up relationships in which one party (the principal) determines the tasks that another party (the agent) must perform. This theory has a lot of implications for organizational performance because there can be conflicts between the goals of individuals, the teams, and the entity as a whole. Goal misalignment can result in actions that are incompatible, which can ultimately affect organizational performance. As such, making sure that individual and group objectives are aligned becomes essential for optimizing the performance of the organization.

2.3 Empirical review

Related literatures are reviewed to further solidify the findings of this study and to also identify the likely gaps.

Kamunya (2016) examines how risk management strategies affected the success

of projects carried out by non-governmental organizations in Nairobi City County. The study uses a descriptive research design and a random stratified sampling technique. The data are collected using a structured questionnaire, mostly applied online. Descriptive and inferential statistics are used for data analysis. The results show that there is a significant relationship between project performance and risk management strategies. As a result, the study comes to the conclusion that careful selection of suitable risk management strategies is essential to the success of projects.

Agustiawan and Halim (2019) investigate the impact of accountability on the performance of public sector entities, employing a quantitative research approach. They also utilize the partial least square structural equation model analysis tool to assess the research hypotheses. The findings reveal that financial accountability, performance accountability, and legal accountability positively influence both the quantitative and qualitative performance of public sector organizations. However, there is no evidence supporting the idea that hierarchical and professional accountability affect the performance of public sector organizations when assessed through quantitative methods.

Kasozi and Brandon (2018), examine how compliance with regulations affects an organization's overall effectiveness in the context of statistical tasks. The study selects a sample of 94 employees. The data are collected using a two-phase methodology that included both descriptive and numerical information. The results of the multiple linear regression analysis showed significant correlations between compliance levels and organizational performance, specifically in relation to leadership contributions, cost management, and quality standards. The study's recommendations highlight the necessity of a focused training program aimed at improving staff compliance with quality standards and stressing the incorporation of quality compliance practices into the organizational framework.

Hassan *et al.* (2019), examine the relationship between risk governance mechanisms and bank performance between 2011 and 2015. The results show a strong and positive relationship between risk governance practices and bank performance, especially when it comes to liquidity. This emphasizes how important strong risk governance is to the overall health of banks that operate in Asia's developing economies. As such, it is critical for these banks to be able to recover from

potential negative effects and continue to be resilient.

Erin *et al.* (2019), examine how risk governance affected the financial performance of 50 publicly traded companies in the banking sector of Nigeria over a five-year period from 2013 to 2017. The study uses panel data analysis to assess the effects of different risk governance factors, and the findings show that metrics like Enterprise Risk Management, the existence of a Chief Risk Officer, the level of activism in the Board Risk Committee, and the independence of committee members had a significant impact on the companies' economic performance. On the other hand, there is a negative relationship found between these companies' financial performance and the size of their Board Risk Committee. To sum up, the study suggests that having a competent Chief Risk Officer, a strong and functioning Board Risk Committee, and ensuring director independence within the committee are all actions that would improve the company's financial performance in general.

Researches on the connection between risk governance and organizational performance have concentrated on various indicators of risk governance (Hassan *et al.*, 2019; Erin *et al.*, 2019). In contrast, this investigation delved into the examination

of risk governance dimensions based on the framework presented by Shad and Lai (2015). This framework incorporates enterprise risk management strategy, accountability, and compliance as key elements for evaluating risk governance. Furthermore, earlier studies emphasizing specific risk governance metrics, including risk management strategy, accountability, compliance, and performance (Kamunga, 2016; Kasozi & Brandon, 2018; Agustawa & Halim, 2019), are centred on diverse institutions such as non-governmental organizations, projects, statistical works, public sector entities, and banks in various countries. In contrast, the current study specifically targeted telecommunications firms in Nigeria.

3.0 Methodology

The study employs a cross-sectional descriptive survey approach. This is a fast, easy, and precise way to gather information about a community (Zikmund, 2003). Data are collected from 372 respondents from the Nigerian telecommunication firms using a Google survey questionnaire. Based on the nature of the study, a simple random sampling technique was adopted. A simple random technique guarantees that each member of the population has an equal probability of being chosen for the sample (Ghauri & Gronhaug, 2005).

Multiple linear regressions are employed to determine the relationship between independent variables (risk management strategy, accountability and compliance) and the dependent variable organizational performance.

3.1 Model Specification

The study adopts and modified the model specification of Kakiya *et al.*, (2019) who explores the moderating effect of intellectual capital on the relationship between risk governance and organisational performance of State corporations in Kenya. The model for this study is therefore specified as;

$$OP = f(RMS, AC, CMP) \dots \dots \dots (1)$$

$$OP = \beta_0 + \beta_1RMS + \beta_2AC + \beta_3CMP \varepsilon_1 \dots \dots (2)$$

Where; OP is organisational performance of telecommunication firms, RMS is the risk management strategy, AC is accountability of management in executing their jobs, CMP compliance to regulatory frameworks guiding the operations of telecommunications firms, β_0 is represent the constant term of the equation, β_1 , β_2 , and β_3 represent the Beta Coefficient to be estimated and ε_1 is the error term.

4.0 Results and Discussion

Data analysis, interpretation and discussion of finding are presented:

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326 ^a	.106	.099	.31284

a. Predictors: (Constant), CMP, RMS, AC

Table 2: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.271	3	1.424	14.548	.000 ^b
	Residual	36.015	368	.098		
	Total	40.287	371			

a. Dependent Variable: Organisational Performance

b. Predictors: (Constant), CMP, RMS, AC

Table 3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.268	.184		17.773	.000
	RMS	.139	.024	.286	5.765	.000

AC	.015	.033	.025	.438	.662
CMP	.096	.035	.155	2.752	.006

a. Dependent Variable: Organisational Performance

Table 1 shows that value of R .326 which indicates that there is a positive relationship between the explanatory variables (RMS, AC and CMP) and the dependent variable (OP). The R² of .106 shows that about 10.6% of the variation in OP can be explained by RMS, AC, CMP. Table 2 of the ANOVA table shows the model fit is statistically significant (P-value .000 < .05). Table 3 have an intercept value of 3.268 which shows the value of OP when RMS, AC and CMP is constant. The slope of .139%, .015% and 0.96% shows that at every percentage increase in RMS, AC and CMP, organisational performance (OP) increases by 13.9%, 15% and 96% respectively.

4.1. Discussion of findings

This study examines the relationship between risk governance and the organizational performance of telecommunication firms in Nigeria.

There is no significant relationship between risk management strategy and organisational performance, which is not accepted. The finding discovers a significant relationship between risk management strategy and organisational performance. This is consistent with Kamunya (2016, who concludes that a

project's success depends on the careful selection of risk management strategies. The findings show how important risk management strategies are in identifying and mitigating organizational vulnerabilities, which if left unchecked could have a negative impact on a telecommunications company's ability to achieve its goals. This finding also validates agency theory which specifies that risk management strategy has contributed to formation of principles well describing opportunities by management that inquire actions for effective opposition to arising threats.

There is no significant relationship between accountability and organisational performance. This is supported by the study which shows that there is no relationship between accountability and organisational performance. The finding is inconsistent with Agustiawan and Halim (2019) which show a significant relationship between accountability and performance. According to the study's findings, telecom companies should create a work environment that is supportive of employees' roles and responsibilities and hold them accountable for their actions. This is in line with the agency theory, which holds that in order to

improve organizational performance, agents must report, disclose, and be held accountable for all activities.

There is no significant relationship between compliance and organisational performance, this was not supported, rather the finding shows a significant relationship between compliance and organisational performance. This implies that the telecommunications firm upholds compliance with internal and external standards governing its operations in order to preserve the operational efficiency, financial risk minimization, and customer satisfaction required for accomplishing the organization's objectives. The result obtained was supported by the study of Kasozi and Brandon (2018) who show a significant relationship between compliance levels and organizational performance measured by leadership's role, cost and quality. This finding also validates the agency theory's premise that the implementation of business compliance measures reduces information asymmetry: businesses that successfully apply compliance above and beyond legally required standards—achieve higher performance levels.

5.0 Conclusion and Recommendation

Success for companies operating in Nigeria's telecommunications industry depends on the implementation of risk governance measures. This study develops our understanding of the different aspects of risk governance and how they affect the performance of the organization. These measures are important because they are part of the framework that telecommunication companies must use to overcome risks in order to achieve their goals and objectives. In particular, risk governance measures clarify the approach taken to manage risks, the responsibility of the board and management in carrying out their duties, and the compliance with the present regulations and laws that regulate the telecommunications industry in Nigeria.

This study, therefore, recommends that more risk management plans should be created in order to handle the possible negative effects of technology on performance. In addition, a strong supervision system for managers and board members must be put in place in order for them to carry out their duties in an efficient manner. Lastly, the creation of a thorough the compliance department is necessary in order to avoid legal sanctions and guarantee maximum effectiveness.

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Adoption of Social Media Technology and Impact on Small and Medium Enterprises (SMEs) Competitive Advantage in Federal Capital Territory, Abuja

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ABSTRACT

Many businesses are adopting social media networks to woo potential customers. Social media networks have been reported to help SMEs compete favourably between themselves, and in many instances compete with larger businesses. Notwithstanding its popularity, there is still very limited information on the impact of social media adoption on SMEs competitive advantage especially in developing countries where SMEs are predominantly in the informal sector. Thus, this study examines Social Media Adoption and its Impact on SMEs Competitive advantage in the Federal Capital Territory (FCT), Abuja, Nigeria. The study adopts a survey research design. The population comprises of 2,825 owner manager SMEs in FCT Abuja. A sample of 338 is drawn using Krejcie and Morgan table. Primary data are collected through the use of questionnaires. However, 326 questionnaires are retrieved from the respondents. Regression analysis is used to analyze the data with the aid of SPSS Version 20. The study reveals that two independent variables (perceived usefulness and perceived ease of use) had a positive significant impact on SMEs competitive advantage in Abuja. It therefore, recommends that there is need for advocacy by the government agencies in charge of SME activities to enlighten SMEs on the importance of social media adoption to their businesses. It equally recommends for the training SMEs on the usage of the various social media platforms and how they can leverage on them to gain competitive advantage.

Keywords: Perceived Ease of Use, Perceived Usefulness, Competitive Advantage, SMEs.

Introduction

Currently, internet diffusion amongst businesses is on the increase. The Internet-driven online technology is regarded as a

vital platform for businesses competitive advantage (Mandal, 2017). Al Mamun, et al., (2018) propose that to be competitive

and satisfy potential customers' needs, Small Medium Enterprises (SMEs) must adopt new technologies such as social media (SM).

Social Media is a networking technology that enables people to make more social connections while sharing material, participating in discussions, and controlling content through networks (Voorveld, Van Noort, & Muntinga 2018). Social media websites and corresponding mobile applications like Facebook, WhatsApp, Instagram, Twitter, Snapchat and YouTube are among the most common ones (Al-Abdullatif & Aladsani, 2021).

Social Media has overtaken the globe, with more than 3.8 billion users and still counting (Lawrence 2022). Social media has transformed communication, and one part of communication where social media has had a great influence is in SMEs competitive advantage (Nasidi, et al., 2022; Calli & Clark 2015). Companies use social media to identify and engage with customers, enhance sales through advertising and marketing, track consumer trends, and give customer service or support (Nasidi, et. al., 2022).

SMEs are however facing new challenges every day as the global market competition rises (Chen et al., 2016). Studies highlight that SMEs around the globe are

encountering stringent competition from larger enterprises and corporate firms (Kaneko & Yimruan, 2017; Yan & Huang 2021). According to Kaur (2017), traditional marketing strategies are not sufficient and relevant anymore in today's highly competitive business environment. Dinehart (2011), points out that, in order to stay competitive in business, enterprises need to use modern digital marketing techniques of the SM technology.

Among the advantages of using social media is the obtaining of the knowledge of customers' needs and wants (Lacurci 2021). The "purposive inflows of knowledge from customers and competitors and capabilities to efficiently manage internal knowledge are even more relevant for sustainable competitiveness of SMEs" (Pérez-González et. al., 2017). This customer and competitor knowledge obtained from the social media can help businesses gain competitive advantages (Lacurci 2021).

Be that as it may, some SMEs are still hesitant to include social media in their marketing program due to lack of solid information about the social media platforms especially with regards to its effectiveness to (Vaynerchuk 2018). Alam and Noor (2019), buttress that SMEs are being discovered as lacking in the requisite

knowledge about the possible actual advantages of social media.

In Nigeria, SMEs are now investing and showing more interest in the Internet/online social media marketing business (Oyedele, Oworu & Adbulganiyu 2020). These SMEs spans from as industrial/ manufacturing, agricultural, and services. There is however, paucity of studies on how social media technology impacts on SMEs competitive advantage. Scholars propose for further studies on social media technology adoption and its impact on SMEs competitive advantage, as regards to developing countries (Selvanayagam & Rehman, 2019). Thus this study explored the impact of SM adoption on the competitive advantage of SMEs in Federal Capital Territory (FCT), Abuja, Nigeria.

Although, studies have examined social media adoption and its impact on SMEs (Ajum 2018; Kumar et al., 2020; Lawal et al. 2022), but some have however, generally focused on SME performance as a dependent variable (DV). This study examines competitive advantage as the DV. According to Farida, and Setiawan (2022), competitive advantage variable is rarely studied, especially for SMEs and micro, small, and medium enterprises (MSMEs). The research emphasizes the need for further

studies on SME competitive advantage. Hence this study explores competitive advantage of SMEs as the DV.

Existing studies do not seem to examine the components of technology adoption (perceived usefulness, PU and perceived ease of use, PEOU) and the impact they would have on SMEs competitive advantage. PU is an individual's perception of how technologies or a particular technology are set to improve the individual's tasks or roles in terms of efficiency and effectiveness (Lacurci 2021). PEOU measures one's perception of the technology that is easy to understand, learn and operate (Lacurci 2021).

Thus, this research combines these variables (PU and PEOU) as Independent Variables (IV) and examines their impact on competitive advantage (Dependent Variable, DV) of SMEs in FCT, Abuja, Nigeria.

Its aim is to investigate adoption of social media technology and its impact on SMEs competitive advantage in FCT Abuja. The specific objectives are as follows;

- i. To evaluate the perceived usefulness of social media technology and its impact on SMEs competitive advantage in FCT Abuja.
- ii. To determine, whether or not, the perceived ease of use of social media technology has

impact on SMEs competitive advantage in FCT Abuja.

2.0 Review of Related Literature

Competitive advantage

Competitive advantage is obtained when an organisation develops or acquires a set of attributes (or execution actions) that allow it to outperform its competitors (Wang, 2014). Measurements that show competitive advantage variables are imitability, durability, and ease of matching (Correia, et al., 2020). Competitive advantage is at the heart of a company's performance in a competitive market (Zhang & Zhang 2022; Almulhim 2020). A company's advantage grows from the value or benefits that the company can create for its buyers. Thus, competitive advantage is a position in which the organisation is still working to beat competitors (Farida & Setiawan 2022).

Perceived usefulness (PU)

Davis et. al., (1989) theorize and develop PU in their original Technology Acceptance Model (TAM). PU defines prospective user's subjective probability that using a specific application improves operations (Lu, Tao & Wang 2009). It provides diagnostic lenses into how actual use and intention to use are influenced (Gekombe et al., 2019).

Gekombe, et al., (2019) further state that PU is "the degree to which a person believes that using a particular system would enhance his or her job performance". Given the context of social media, PU is an important factor in determining attitudes toward adoption when managers perceived that social media would streamline their tasks and provide valuable information or insights (Austermann & Mertins, 2014). The hypotheses are thus, developed as follows:

H₁ Perceived usefulness of social media technology has no significant impact on SMEs competitive advantage in FCT Abuja.

Perceived ease of use (PEOU).

Perceived ease of use (PEOU) measures the prospective user's assessment of the mental efforts required of the use of the target application (Davis, 1993). The PEOU variable is also theorized and proven in the original TAM (Davis et. al., 1989). PEOU refers to "the degree to which a person believes that using a particular system would be free of effort" (Gekombe, et al., 2019). Perceived ease of use is the idea that using a system is somewhat free of effort (Efosa, Mahesh & Olusola 2018). This construct measures one's perception of the technology being easy to understand, learn and operate. This study adopts Lacurci's (2021)

definition that PEOU construct measures one's perception of technology being easy to understand, learn and operate.

The hypothesis is thus, developed as follows:

H₂ Perceived ease of use of social media technology has no significant impact on SMEs competitive advantage in FCT Abuja.

Reviews of some specific Studies

Tan, Chong, Lin and Eze (2009), investigate various factors for ICT adoption in Malaysian SMEs by applying a questionnaire-based survey and collecting the data from 406 owners/managers placed in Malaysia's Southern region. The independent variables include competitive advantage, compatible services, complexity, observability, trialability, online cost, security, benefits, and barriers. The results show that the internet's adoption is a low cost but effective solution for the managers/owners. It improves the relationship with customers. The IV was competitive advantage and had dimensions of complexity, observability, trialability. In this present study undergone, competitive advantage is used as the DV and is measured with imitability, durability, and ease of matching (Correia, 2022).

Macharia (2023) explores TAM's perceived usefulness influence on social network site

(SNS) preference for accessing reproductive health information among university students. The study adopts a mix method approach. The findings establish that perceived usefulness influenced the selection of a specific SNS. The key constructs of perceived usefulness are currency (4.083) and relevance (4.034). SNS information can be accessed frequently, and instantly, and is always up to date. This study is different, because it uses the first dimensions of perceived usefulness developed by Davis (1989). Scholars have advocate for the use of these dimensions to measure perceived usefulness of technology. Moghavvemi, Hakimian and Feissal (2012), in Malaysia, investigate adoption factors and competitive advantage through IT adoption in SME. In the research model, various aspects connected with IT adoption in SMEs were relative advantage, complexity, compatibility, observability, trialability, self-efficacy, and attitude. The results show a significant contribution of information technology in SME's growth. The results further reveal that IT usage can increase companies' competitive strength from process engineering, efficiency, cost reduction, and effectiveness. This study is different in the sense that it uses the Technology Acceptance Theory (TAM) to

test the relationship of TAMs components (perceived usefulness and perceived ease of use) on SMEs competitive advantage.

Utama, Karmagatri, Yustian, (2022) evaluate Analysis of SMEs consideration in adopting new technology using technology adoption model. The study adopts a quantitative approach, the population comprised of 225 respondents. The data are analyzed using Structural Equation Modelling. The findings shows that all the variables including perceived usefulness, perceived ease of use, compatibility and cost effectiveness significantly influenced the attitude and intention to use technology. This differs from the others as it employs the use of the traditional variables developed by Davis (1989) (perceived usefulness and perceived ease of use) to measure competitive advantage of SMEs in FCT Abuja.

Gaps Identified from the Reviews

After reviewing past studies, a variable inclusion gap is identified which this study seeks to address. Most of the empirical studies reviewed focus on using performance as the DV, and used growth, productivity, profits to measure performance of social media adoption. This study focuses on using competitive advantage as the DV, as suggested by Lacurci (2021). It further

separates competitive advantage from performance and does not include any characteristics of the performance concept.

Theoretical framework

The study is underpinned by The Technology Acceptance Model by Davis (1986).

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is a theory that describes the perception of technology users. Davis (1986) creates this model to explain the effects of system characteristics on users of computer-based Technology Systems. TAM is the most widely used model for identifying factors contributing to technology acceptance. The theory suggests that, when users are presented with a new piece of technology, several factors influence their decision about how and when they will use the technology (Ardiansah, Chariri, Rahardja, & Udin, 2020). TAM identifies fundamental variables (perceived usefulness, perceived ease of use) suggested by other researches and specified the relationships among these variables as the intention to use technology. This model shows that, when users are presented with new technology, some factors influence their decisions about how and when they will use them. The TAM predicts user acceptance of a technology

based upon estimation of three core constructs; perceived usefulness (PU), perceived ease of use (PeU) and behavioral intention (BI) (Svendsen et al., 2013).

Methodology

The study adopts a survey research design. The population of the study comprises of 2,825 registered SMEs in FCT Abuja. The figure is extracted from National MSMEs survey report (2017). Sample size of 338 is drawn from using Krejcie and Morgan (1975) table.

Primary data is used with the aid questionnaires. The FCT Abuja comprises of 6 area councils of Abaji, Abuja Municipal, Gwagwalada, Kuje, Bwari, and Kwali Abuja. Hence the FCT is divided into six clusters. Simple random technique is used to select respondents from the clusters.

A pilot study is carried out using SMEs in Paiko, Niger State in order to test for the validity and reliability of the instrument. Each scale item is rated by experts in terms of the relevance of its constructs. The items

are rated on 4-point ordinal scale as suggested by Lynn et al., (1981), in Polit and Beck (2006). The authors advocate for the use of a 4-point scale to avoid having a neutral and ambivalent midpoint. Davis (1992), four point’s item-rating continuum is used: 1= not relevant, 2= somewhat relevant, 3= quite relevant, 4= highly relevant.

The measures for the dependent variable (competitive advantage) are adopted from the study of the study of Correia, Dias, Teixeira (2022). Responses are adapted on five point likert scale ranging from strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1). Items adapted includes: Innovation, quality, delivery dependability, and time.

Perceived usefulness and perceived ease of use measures are adapted from the study of (Davis, 1986, 1989). Responses are also adapted on five point likert scale ranging from strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1).

<i>Table 1</i> Variable	Number of Items	Cronbach Alpha
Perceived ease of use	6	0.792
Perceived usefulness	6	0.867
Competitive advantage	6	0.868

Source: SPSS Output, 2024

From table 1 above, all the measures possess a high reliability standard judging from

Cronbach’s alpha, ranging from 0.792 to 0.868 for all the variables and this is

considered reliable. According to Griethuijsen et al., (2014), Cronbach Alpha values above 0.6 are considered reliable.

This is concerned with the presentation of the data. Which consist of descriptive statistics of the respondents, and also inferential data analysis and discussion of findings based on the data collected from the respondents.

Data Presentation and Analysis

Descriptive statistics of respondents

Table 2 demographics of respondents

Demographic variable Percentage (%)	Frequency	
Gender of respondents 76	Male	249
	Female	77
		326
Age distribution of respondents 19	18-27	61
	28-37	80
	38-47	75
	48-57	46
	58 and above	64
		326
Sectors of respondents 37	Agriculture	119
	Service	134
	Manufacturing	73
	326	
100		

Source: SPSS output 2024

Multiple regression analysis and test of hypotheses

To test the hypotheses formulated in this research, multiple regressions are used to determine the multiple effects of, perceived usefulness and perceived ease of use on

competitive advantage of SMEs in FCT Abuja. The assumptions of linear regression like normality, linearity, multicollinearity, homoskedascity are carried out before the test of hypothesis. The outputs are:

Table 3 Regression Output

		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
Model		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.312	1.250		1.026	.300		
	Perceived usefulness	.165	.066	.135	2.156	.002	.626	1.367
	Perceived ease of use	.612	.062	0.410	5.465	.000	.651	1.460

a. Dependent Variable: competitive advantage

Source: SPSS Output, 2024

Hypothesis I

H₀₁: Perceived usefulness have no significant effect on the competitive advantage of SMEs in FCT Abuja.

The coefficient of “perceived usefulness” stands at 0.165 which is positive. This implies that an increase in how SMEs perceived that SM is useful to them, would lead to an increase in their competitive advantage.

The *t* statistics of “perceived usefulness” stands at 2.156 with a p-value of 0.002. The p-value is less than 0.05, indicating that the relationship depicted in the model is significant at 95% confidence level. This implies that the study rejects the null hypothesis which states that perceived usefulness does not have a significant impact on the competitive advantage of SMEs in FCT Abuja, and accepts its alternate hypothesis which states that perceived usefulness has a significant effect on the competitive advantage of SMEs in FCT Abuja.

Hypothesis II

H₀₂: Perceived ease of use has no significant effect on the competitive advantage of SMEs in FCT Abuja.

The coefficient of “perceived ease use” stands at 0.612 which is also positive. This implies that an increase in how SMEs perceived the ease in using SM, the more competitive they become. The *t* statistics of “perceived ease of use” stood at 5.465 with a p-value of 0.000. The p-value is less than 0.05, indicating that the relationship depicted in the model is significant at 95% confidence level, the study then rejects the null hypothesis, and accepts its alternate hypothesis, which states that perceived ease of use has a significant impact on the competitive advantage of SMEs in Abuja.

Discussion of findings

The first finding shows that perceived usefulness has significant positive effect on competitive advantage of SMEs in Abuja. This indicates that the more SMEs perceive

the usefulness of social media, the more they adopt it, and the more competitive advantage they become. This finding is supported by Davis *etal* 1989; Yen, 2009) which states that attitude (perceived usefulness) is the key factor in analyzing the usage technology of social media.

On the effect of perceived ease of use; the study reveals that perceived ease of use had a positive and significant impact on SMEs competitive advantage in Abuja. This indicates that the more SMEs perceive the ease of usefulness of social media, the more competitive advantage they have.

Recommendations

Based on the findings, the following recommendations are put forward:

- i. The finding establishes that perceived usefulness had a positive significant impact

on SMEs competitive advantage. The study recommends that there should be policy interventions to direct big companies that are grounded in social media to encourage SMEs on the usefulness of social media.

- ii. The findings also indicate that perceived ease of use have positive significant impact on SMEs competitive advantage. The study recommends that government agencies in charge of digital technology like NITDA should help in developing social media platforms that have ease of use, and peculiar to the needs of SMEs. Institutions of learning should also be encouraged to create social media platforms that are unique to SMEs needs. There should be a clear linkage between tertiary institutions and businesses.

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Entrepreneurship Education an Venture Creation: Evidence from NYSC Members in Bida, Niger State

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ABSTRACT

Inadequate or lack of entrepreneurial skills by majority of Nigerian graduates and servicing corps members has made government of Nigeria to make entrepreneurship education mandatory in tertiary institutions of learning and National Youth Service Corps (NYSC) orientation camps. Thus, the study examines the effect of entrepreneurship education on venture creation intention among NYSC members in Bida Local Government of Niger State. The study adopted a survey research and population is 321 NYSC corps members servicing in Bida Local Government of Niger State. The study sampled 178 respondents who are servicing corps members as at year 2023 and questionnaire was the instrument for data collection. The regression result shows that entrepreneurship education (measured by curriculum content, learning environment and educators' competence) has significant effect on venture creation intention among NYSC members in Bida Local Government of Niger State. The study therefore recommended among others: every Corp member should be required to work for at least three months in companies that can help them launch their own business. Entrepreneurship facilitators should possess greater practical knowledge. The organized private sector and various tiers of government should contribute to the funding of entrepreneurship education research and provide supportive incentives such as easy access to finance options.

Keywords: Entrepreneurship Education, Venture Creation, Graduate Unemployment, NYSC members, Entrepreneurial Skills.

1. Introduction

Graduates unemployment and Nigeria (Onuma, 2016). This is because underemployment along with other majority of unemployed graduates lack the socioeconomic issues are problems in fundamental entrepreneurial skills needed to

start their own businesses. Venture creation is essential for the expansion of any country's economy since it brings about substantial modifications in both business and society (Nzewi, Onwuka, & Onyesom, 2017). Venture creation is a strategy for launching new enterprises and filling the gap between a funded business and an idea (Muhammad, 2018).

The term venture creation is developing a novel concept or technological advancement into a profitable business that can draw investors (Gatewood, Shaver, & Gartner, 2002 in Rabi'u, 2018). A start-up entity created with the intention of making a profit is a venture creation (Business Dictionary, 2016). Many business endeavors started in a response to the market demand, lack of market supply or when a new business opportunity is identified (Rabi'u, 2018). Dimensions of venture creation intention include opportunity identification and business start-up (Gaglio, 1997 in Rabi'u, 2018; ICAS, 2014). Venture creation through opportunities' identification includes, catering and decorating, creating shoes, making soap and detergent, raising fish, and making beads and wire, so on. Majority of new venture creation formations help the economy by fostering innovation, employment generation and economic

growth (Nzewi, Onwuka & Onyesom, 2017). Venture creation may be affected by entrepreneurship education taught in tertiary institutions and National Youth Service Corps (NYSC) orientation camps.

Entrepreneurship education has been recognized for many years as being essential to the structural and functional change of any economy. This is because entrepreneurship education equips graduates with the necessary skills to enable them to be innovative and creative in exploring business opportunities and provides valuable education for young people that will help them become independent. It also gives graduates the training and assistance they need to launch a career in small and medium-sized businesses and encouraging the creation of new ventures. It promotes the industrial and economic development of rural and underdeveloped areas (Oborah, 2006 in Matthew, Haruna, Ameh & Maisamari, 2020). Those individuals who graduated from tertiary institutions and NYSC orientation camps are given requisite training in the skills they will need to meet society's demands for labour.

Moreover, entrepreneurship education program in Nigerian higher institutions is to promote spirit of entrepreneurship among students and staff for both learning and

promoting the creation of business ventures (Yahaya, 2011 in Oguntimehin, 2018). Entrepreneurship education is a course or program that introduces business concepts and business creation strategies in order to get students ready to launch their businesses (Hauwa and IIsichei, 2019). The dimensions of entrepreneurship education that may affect venture creation for employment generation and economic growth include curriculum content, learning environment and educators' competence (Fred, Sunday, Kelechi, Mercy, Adeshola, Emmanuel, Chibogu & Temitope, 2021). Though, the finding of the National Directorate of Employment (NDE) indicate that over 200,000 Nigerian graduates who went through the National Youth Service Corps (NYSC) in the in the past five years were still jobless, despite the World Bank's claim that one in ten graduates find employment (Lgwe, Adebayo, Olakanmi, Ogbonna, & Aina, 2013).

Besides, Muhammad, Ayesha and Muhammad (2015); Agwu, Onwuegbuzie and Ezeifeke (2017); Syed and Andras (2017); Rabi'u and Kibuuka (2017); Andah, Hauwa and IIsichei (2019); Matthew, Haruna, Ameh, and Maisamari (2020); Othman, Othman and Juhdi (2022) and Egwakhe, Abdullahi, Akande and Umukoro

(2022) establish a strong relationship between entrepreneurship education and venture creation, business startups or entrepreneurship development in Nigeria. Out of all the reviewed literatures, only Egwakhe, Abdullahi, Akande and Umukoro (2022) focus on NYSC members in Nigeria. Others emphasize more on university or students of other tertiary institutions and fresh graduates. In addition, none of these researchers have focused on NYSC members in Bida Local Government. Therefore, the research examines the effect of entrepreneurship education on venture creation intention among NYSC members in Bida Local Government in Niger State. The study intends to be a contribution to the policy makers, graduates, corps members and potential researchers as a reference point.

The study is guided by the following null hypotheses so as to achieve the research objective.

H₀₁: Learning Environment has no significant effect on venture creation intention among NYSC members in Bida Local Government.

H₀₂: Curriculum Content has no significant impact on venture creation intention

among NYSC members in Bida Local Government.

H₀₃: Educators' Competence has no significant effect on venture creation intention among NYSC members in Bida Local Government.

2. Literature Review and Theory

2.1 Concept of Venture Creation

Business startups, business development and enterprise development are interchangeable concepts. Muhammad (2018) asserts that, venture creation is a strategy for launching new enterprises and closing the disparity between a financed firm and an idea. Perry *et al.* (2008) opine that venture creation is a person's ability to take advantage of business possibilities by launching a new business with the goal of creating employment or self-employment. Bassegy and Atan (2012), in Andah *et al.* (2019), define venture creation as a circumstance in which graduates from institutions can launch businesses for self-sustenance. Abdul (2018), argues that venture creations should be taught using a hands-on approach to detect business prospects.

The operational definition of venture creation is the definition given by Bassegy and Atan (2012), in Andah *et al.* (2019). The scholars define graduates venture creation as a circumstance in which graduates from

tertiary institutions can launch new businesses for their self-sustenance. This is because the definition encourages venture creation among graduates.

2.2 Concept of Entrepreneurship

Education

Neck and Greene (2011) in Matthew *et al.* (2020), argue that because entrepreneurship education is a collection of practices rather than a process with known inputs and anticipated effects, it can be viewed of as a method. These methods include learning stages rather than steps to finish, iterative rather than linear, creative rather than predictive, an emphasis on action rather than planning, and treating education as an investment rather than learning for an expected or predictable return, among others. Drenkat (2014), sees training in entrepreneurship has the ability to secure a steady stream of human capital, which yields a substantial return in terms of fundamental study findings, education, knowledge acquisition via experience, and capacity development. In order for students to acquire the skills, knowledge, attitudes, and interests required to become job creators, high-quality entrepreneurship education is required. According to Onuma (2016), entrepreneurship education spans the time of business development, leadership, change,

and growth and continuing procedure that prepare individuals (students) with entrepreneurial competencies. Udo-Imeh, Magaji, Hamidu and Yakubu (2016), say entrepreneurship education is the preparation for innovation and advancement. Hauwa and IIsichei (2019), opine that entrepreneurship education is a course or program that introduces business concepts and business creation strategies in order to get students ready to launch their own businesses. Jones and English (2004), in Othman, Othman and Juhdi (2022), define entrepreneurship education as a process that teaches students how to identify economically viable opportunities as well as how to develop a vision and sense of identity as well as the information and skills necessary to take advantage of them. As a result, it is simpler for students to see the entrepreneurial opportunities present in their immediate environment when they have a solid understanding of the market. The operational definition of entrepreneurship education in this study is the definition given by Hauwa and IIsichei (2019). This is because the definition encourages entrepreneurship education among students ready for venture creation.

2.2.1 Dimensions of Entrepreneurship Education

Learning Environment: Despite the fact that each level of education in this country contributes significantly to society, there is a stronger connection between university education and corporate operations across the nation. According to Pamela (2017), university support for a business startup may be considered as a strategy used by the school administration to provide the necessary training and preparation for the enterprise. It is an intentional and conscious effort that extends beyond the classroom and involves a practical approach to dealing with the creation of an environment that fosters creativity and capacity development in both people and the environment (Poblete & Amorós, 2013). The following components make up the learning environment: initiatives, seed funding, technology patenting, etc. However, the researcher uses these dimensions because others also used it. For instance, Fred *et al.* (2021), also used these three dimensions.

Curriculum Content: According to Olakundu (2017), curriculum content refers to the instructional modules that contain the knowledge students are intended to learn as part of a course or program. It is the manual that must be followed while instructing or

having an impact on learning (Anene & Imam, 2016). Olakundu (2017), holds that, the curriculum should emphasize management and business knowledge, including market analysis, estimation techniques, financial analysis, leadership concepts, human resources, and other administrative skills and talents. According to Chinweoke, Egwu and Nwabekee (2015), it should address the problems related to new business start-ups, business procedures, and industry conditions.

Educator's Competence or Teaching

Method: Entrepreneurial or enterprise education is mostly made up of its own and other varied teaching philosophies (Greene, 2014). According to Hill (1988) in Andah *et al.* (2019), the approach taken to teaching entrepreneurship education at the outset consists of a plan that the business intends to

Independent Variables

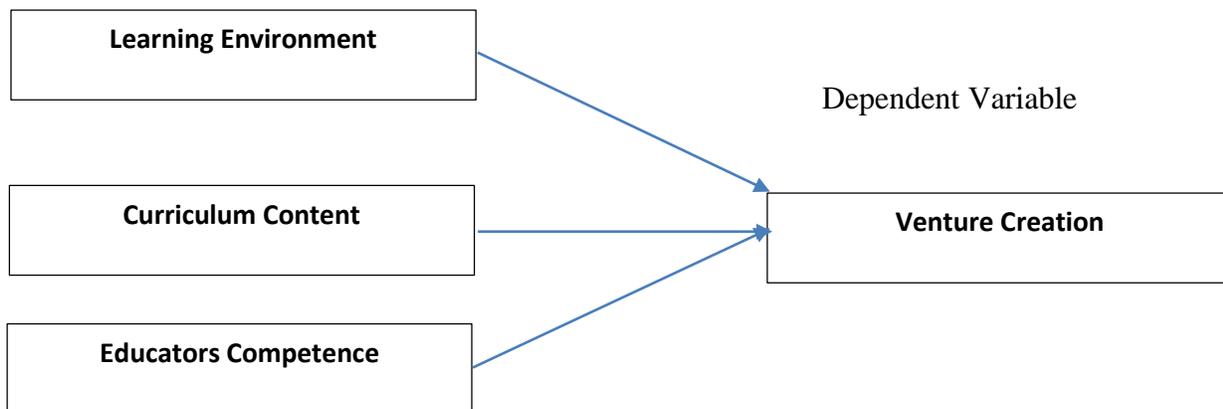


Fig. 1: Researcher's Conceptualization, 2023.

implements or strategizes for success. According to Honig (2004) in Andah *et al.* (2019), simulation and games are two training methods that will be helpful in the development of start-up businesses. As a result, Solomon (2007 in Andah *et al.*, 2019) cover some educational approaches, including the creation of business plans, professional classes, case studies, and mentoring or supervisory effort. Additionally, he made a distinction between various approaches, such as specialist visits, experiential learning, and so forth. Subsequently, the above views on teaching methods, the experimental method which includes detailed minded teaching are decreed as the best strategy. The research schematic model is shown in Figure 1 below:

2.3 Review of Empirical Literature

Studies have looked into the effect of entrepreneurship education on venture creation. For instance, Muhammad *et al.* (2015) examine how entrepreneurship education affected Pakistani university students' intentions and desires for starting their own businesses. The study samples 160 participants and the regression result indicates that education has a significant impact on business venture creation. However, it fails to state any method used in estimating the sample size for their study. Agwu *et al.* (2017), investigate how entrepreneurship education affects the development of new businesses. Semi-structured interviews are used as the primary source of data. The findings demonstrate a substantial relationship between the entrepreneurship education constructs and new venture development among students. But, the study fails to use any robust method for data analysis and testing of hypotheses. This study intends to fill the gap by using multiple linear regressions for data analysis and testing of hypotheses. Rabi'u and Kibuuka (2017) examine the effect of entrepreneurship education and venture creation potential among colleges of education graduates in Kano state, Nigeria. The study samples 385 graduates from three

colleges of education in Kano state. The result demonstrates a significant positive relationship between entrepreneurship education and venture development potentials among graduates of educational institutes in Kano state. However, the research work failed to run any normality test before hypotheses testing. Andah *et al.* (2019) assess the impact of entrepreneurial education on graduate venture development in six states of Nigeria. The study samples one state from each 6 geopolitical regions. The study sampled 369 serving corps members using convenience and purposeful sampling techniques. The result shows that entrepreneurial education has significant impact on graduate venture development in six states of Nigeria. The study comes to the conclusion that graduate venture development by Nigerian graduates can greatly benefit from entrepreneurship education.

Again, Matthew *et al.* (2020) investigate the impact of entrepreneurship education on students' entrepreneurial development at the college of education in Billiri, Gombe State. The research uses a structured questionnaire and collects data from 100 students. The outcome shows that, students' experiences with entrepreneurship education have significant impact on entrepreneurial

development at the college of education in Billiri, Gombe State. But there is no robust technique for data analysis or testing of hypotheses in the study. Othman *et al.* (2022) examine how entrepreneurship education affect pre-start-up behavior in Malaysia among students 214 business students and 227 students from non-business schools made up the 441 final-year students. Smart PLS result indicates a direct relationship between entrepreneurship education and pre-start-up behavior of final year students in Malaysia. Egwakhe *et al.* (2022) examine effect of entrepreneurship education on business startup performance using human characteristics operate as a growth-catalyst moderator. A cross-sectional survey study approach is used to collect information from 406 graduate entrepreneurs before enrollment in NYSC in Lagos State. The result indicates personal characteristics significantly affect the relationship between entrepreneurship education and firm startup performance in Lagos State. However, the study's focus is only on NYSC participants in Lagos State. By analyzing the impact of entrepreneurship education on NYSC participants in Bida Local Government of Niger State, the researcher hopes to close this gap in the literature.

2.4 Theoretical Framework

The human capital entrepreneurship theory forms the foundation of this work. Entrepreneurship theory based on human capital was introduced by Becker in 1975. When compared to personality characteristic theory, the theory is adopted primarily because it is better able to explain and investigate the research of entrepreneur development and progress because human capital can be built and is dynamic while personal traits are constant. This is so that the entrepreneur can continue to improve his or her human capital at every stage of the entrepreneurial process by acquiring new skills and knowledge.

Human capital is divided into two distinct poles by Ucbasaran, Westhead and Wright (2006). These poles are entrepreneurship-specific human capital and venture-specific human capital. They argued that whereas venture-specific human capital is associated with corporate organization research, entrepreneurship-specific human capital has received the greatest attention in the field. They demonstrated that the three key components of entrepreneurship-specific human capital are entrepreneurial capacity (the ability to recognize business opportunities and seize them), parental foundation (entrepreneurs at the beginning

of their development watch their family members acting innovatively), and the capacity to understand the concept of life as an entrepreneur (attitude development toward risk, new business start-up, and perceptions on finance and management). The venture's specialized human capital refers to an entrepreneur's understanding of the endeavor, familiarity with their clients and relationships with service and product providers, suppliers, and other business-related entities.

As a result, some skills and knowledge acquired by an entrepreneur may be difficult to categorize because they may belong to more than one of the two classifications (i.e., venture-specific human capital and entrepreneurship-specific human capital). Thus, this study only focus on using human capital that is unique to entrepreneurship. This study's application of the human capital theory of entrepreneurship is based on the idea that providing NYSC members with the proper entrepreneurial education will enable them to launch successful businesses and, as a result, lower unemployment. The hypothesis backs up the claim that a curriculum focuses on developing students' ability to recognize and seize economic opportunities will encourage venture development.

3. Methodology

The study uses a survey methodology. Because of the nature of the study's problem, which needed gathering information to make inferences about potential remedies, the design is chosen. Three hundred twenty-one (321), serving Corp members in the Bida Local Government, made up the study's population. Given the time frame of the research and the ease of accessing the corps members, the NYSC members from batch A, B and C were chosen as at year 2023. The study used the convenience and purposeful sampling techniques to choose its 178-person study sample, which was calculated using Taro Yamane's (1967) formula. The researcher distributed the questionnaire designed to gather the fundamental data required for the investigation. There are two sections to the questionnaire. The respondents' biographical information is the subject of Section A, and the survey variables, which are statements on a 5-point Likert scale (ranging from 5= strongly agree to 1= strongly disagree), are the subject of Section B. The independent variables are learning environment, curriculum content, and educator competency, which are adopted from the works of Fred *et.al.* (2021) and used to

quantify entrepreneurship education. Additionally, venture creation intention, which was adopted from the works of Rabi'u (2018) is included in the dependent variables.

Quantitative data analysis techniques are used to examine the acquired data. To portray quantitative data in tabular form, frequency tables and percentage analyses are used. The Statistical Package for Social Science (SPSS Version 23) is coded and

used to enter and analyze the questionnaire data. For every independent and dependent variable, means, standard deviations, and correlations are calculated. Then, using a regression model, venture creation intention was regressed on the three independent variables. The regression model is described as follows with inspiration drawn from the work of Fred *et. al.* (2021). However, the research regression model is presented below:

$$VC = \alpha + \beta_1EE + \epsilon \dots\dots\dots 1$$

Equation 1 is aimed to achieve the basic objective.

$$VC = \alpha + \beta_1LE + \beta_2CC + \beta_3EC + \epsilon \dots\dots\dots 2$$

Equation 2 is aimed to achieve the specific objectives.

Where:

α: Constant

VC= Venture Creation: It is a start-up entity created with the intention of making a profit is a venture creation.

EE = Entrepreneurship Education: It is a course or program that introduces business concepts and business creation strategies in order to get students ready to launch their own businesses. It is measured by learning environment; curriculum content and educator's competence (Fred *et. al.*, 2021).

LE: Learning Environment: It is an intentional and conscious effort that

extends beyond the classroom and involves a practical approach to dealing with the creation of an environment that fosters creativity and capacity development in both people and the environment.

CC: Curriculum Content: Curriculum content refers to the instructional modules that contain the knowledge students are intended to learn as part of a course or program.

EC: Educator's Competence: It is the approach taken in teaching entrepreneurship education by the educator that will be helpful in starting-up a new business.

e: Error Term

4. Results and Discussions

A total number of one hundred and seventy-eight (178) serving NYSC members in Bida metropolis were sampled and data gathered by means of a structured questionnaire. One hundred and seventy-three (173) were properly filled and returned by the respondents.

4.1 Normality Test

The study used skewness, kurtosis and correlation to test the normality of the distribution and ensure that the data collected were normally distributed. According to Hair, Black, Barbn, and Anderson (2010), for data to be normally distributed, the values for Kurtosis and

Skewness should be between -7 and +7, respectively (See appendix).

4.2. Test of Hypotheses

Multiple Regression Analysis (MRA) was also employed in the study. When P value is less than 0.05 ($P < 0.05$) we reject the null hypotheses and accept the alternative hypotheses. Likewise, when the significant value of P is greater than 0.05, we accept the null hypotheses and reject the alternative hypotheses.

Ho: Entrepreneurship Education has no significant effect on Venture Creation among NYSC members in Bida Local Government.

Table1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986	.972	.971	2.082

Predictors: (Constant), EC, LENVT, CC
 Dependent Variable: VC

The multiple correlation of R, which is 0.986 in the regression result from Table 3 above, indicates a high level of prediction, and the R Square value of 0.972 indicates that the independent variable accounts for over 97% of the variability of the dependent

variable (venture creation). The independent variable accounts for 97.1% of the variance in the dependent variable, according to the adjusted R square of 0.971.

Table 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25377.939	3	8459.313	1952.074	.000 ^b
	Residual	732.361	169	4.333		
	Total	26110.301	172			

Dependent Variable: VC
 Predictors: (Constant), EC, LENVT, CC

The model is statistically significant, as shown by the F value of 1952.074 and the P value of .000 in Table 2 above. We can draw the conclusion that changes in the dependent

variable (venture creation) are predicted by the independent variable (learning environment, curriculum content and educator's competence).

Table 3: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	13.423	1.006		13.341	.000	11.436	15.409		
LENVT	.560	.179	.154	3.137	.002	.208	.913	.068	14.606
CC	.825	.247	.221	3.335	.001	.337	1.313	.038	26.526
EC	1.958	.201	.619	9.723	.000	1.560	2.356	.041	24.398

Dependent Variable: VC

Table 3 indicates multiple linear regression output that is utilized to test the hypotheses. The regression output reveals the effect of learning environment, curriculum content and educator's competence on venture creation as expressed in the equation form as follows. Venture creation (Y) $13.423 = 0.563x_1 + 0.825x_2 + 1.958x_3$. The result of regression output between the entrepreneurial education and venture creation has a constant β value of 13.423 and standard error of 1.006. Learning Environment has positive co-efficient β value of 0.560 with standard error 0.179, t- value of 3.137 and significant level of 0.002 (1 percent). Therefore, learning environment has positive and significant effect on venture creation among

NYSC members in Bida Local Government. This reveals that one percent increase in learning environment will increase venture creation of the NYSC members by 0.560 (56%).

In addition, curriculum content has positive co-efficient β value of 0.825 with standard error 0.247, t-value of 0.221 and significant level of 0.001 (one percent). Thus, curriculum content has positive and significant effect on venture creation among NYSC members in Bida Local Government. This discloses that one percent rise in curriculum content will rise venture creation of the NYSC members by 0.825 (82.5%).

Also, educator's competence has positive co-efficient β value of 1.958 with standard error 0.201, t-value of 0.619 and significant

level of 0.000 (one percent). Hence, educator's competence has significant positive effect on venture creation among NYSC members in Bida Local Government. This means that one percent increase in educator's competence will increase venture creation of the NYSC members by 1.958 (195.8%).

Besides, 95% confident interval of the predictors range between lower boundary and upper boundary limits. First, the lower boundary limit and upper boundary limit of learning environment are 0.208 and 0.913 respectively. The estimated coefficient β value for learning environment is 0.560. This means learning environment has significant and positive effect on venture creation among NYSC members in Bida Local Government. This is because the coefficient value for learning environment ranges between the lower and upper boundary limits.

Second, the lower boundary limit and upper boundary limit of curriculum content are 0.337 and 1.313 respectively. The estimated coefficient β value for job curriculum content is 0.825. This discloses that curriculum content has significant and positive effect on venture creation among NYSC members in Bida Local Government. This is because the coefficient value for

curriculum content ranges between the lower and upper boundary limits. Third, lower boundary limit and upper boundary limit of educator's competence are 1.560 and 2.356 respectively. The estimated coefficient β value for educator's competence is 1.958. This means that educator's competence has positive and significant effect on venture creation among NYSC members in Bida Local Government. This is because the coefficient value for educator's competence ranges between the lower and upper boundary limits.

4.3 Discussion of Findings

Results from the correlation table above indicate that entrepreneurship education (learning environment, curriculum content and educator's competence) have significant relationship with venture creation among NYSC members in Bida Local Government. Likewise, the result from the hypotheses testing shows that learning environment, curriculum content and educator's competence (entrepreneurship education) have positive and significant effect on venture creation among nysc members in Bida local government area of Niger State. Therefore, it concludes that entrepreneurship education have significant effect and relationship on venture creation. This finding is in line with Muhammad *et al.*

(2015); Agwu *et al.* (2017); Syed and Andras (2017); Rabi'u and Kibuuka (2017); Andah *et al.* (2019); Matthew *et al.* (2020) and Othman *et al.* (2022).

4.4 Theoretical and Practical Implications of the Study

The theoretical implication of this study is that, the entrepreneurship theory based on human capital has been understood as a factor that influences entrepreneurship intentions to start a new business among corps members. Such factor is entrepreneurship education gauged by learning environment, curriculum content and educator competency. The practical implication of this research is that, an increase in the entrepreneurship education will significantly increase venture creation intention of NYSC corps members in Nigeria.

5. Conclusion and Recommendations

Majority of Nigerian graduates lack the fundamental entrepreneurial skills needed to start their business. In order to solve the problem, Nigerian government has come up with a policy that make entrepreneurship education mandatory in tertiary institutions and graduates in National Youth Service Corps (NYSC). This study examines the effect of entrepreneurship education on venture creation intention among NYSC

members in Bida Local Government of Niger State. The result shows that entrepreneurship education (learning environment, curriculum content and educator competence) has significant effect on venture creation intention. The study concludes that entrepreneurship education significantly influences venture creation intention among NYSC members in Bida Local Government of Niger State.

The research therefore, recommends that the government should synchronize the entrepreneurship education curriculum in Nigeria through the National Youth Service Corps. Every Corp member should be required to work for at least three months at companies that can help them launch their own business. Entrepreneurship facilitators should possess greater practical knowledge. The organized private sector and various tiers of government ought to contribute to the funding of entrepreneurship education research.

It is important to provide sufficient incentives, such as effective sensitization, a supportive training atmosphere, high-quality lectures and trainings, a skill acquisition center, easy access to finance options, etc. Similar to this, successful and efficient skill acquisition by corps members requires proper monitoring and coordination.

5.1 Limitations and Further Studies

This study limits itself to entrepreneurship education and venture creation intention

among NYSC members in Bida Local Government of Niger State. Further studies should include NYSC members in other local governments of the state for generalization of the findings.

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APPENDIX.

Normality Test using Kurtosis and Skewness

Variables	Skewness	Kurtosis	Decision
Learning Environment (LENVT)	-0.654	0.120	Normal
Curriculum Content (CC)	-0.630	0.336	Normal
Educator's Competence (EC)	-0.690	0.325	Normal
Venture Creation (VC)	-0.765	-0.699	Normal

Source: Researchers computation using SPSS

Moderating Role of Self-efficacy in the Relationship between Entrepreneurship Education and Venture Creation in Nigeria

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ABSTRACT.

Self-employment is top on Nigeria's national agenda because of the country's skyrocketing rate of unemployment, with the expectation that they may give alternative sources of employment. However, it is widely believed that university students' training has not successfully equipped them with the requisite skills and competencies necessary for venture creation. Therefore, this paper aims to examine whether students' self-efficacy could moderate the relationship between entrepreneurship education program and venture creation. 811 students were sampled from universities across Nigeria's North-Eastern and North-Western states. The study uses PLS-SEM to analyze the data. The results reveal that the relationship between perceived course content and venture creation among students is positive but insignificant. The relationship between perceived facilitators' competence and venture creation is also found to be positive and significant. In addition, the findings indicate that self-efficacy has a positive and significant moderating effect on the relationship between perceived delivery method and venture creation. The study concludes that facilitator's profile, delivery method and self-efficacy are essential determinants of venture creation for university students and graduates. Therefore, the study provides theoretical and empirical evidence to the earlier assumption that self-efficacy could strengthen the relationship between entrepreneurship education and venture creation.

Keywords: Entrepreneurship, self-efficacy, venture creation, course delivery, course content.

1. Introduction

Education remains the bedrock of civilization and a means of advancement in all societies. The literature indicates that

education is the pivot for socio-economic and political transformation at all times (Asaju et al., 2014; Belluigi et al., 2020;

Gautam et al., 2015). In Nigeria, like many other countries worldwide, policymakers have recognized the significance of education in national development. The inherent ability of entrepreneurship to drive economic growth and development, as well as an effective remedy for extreme hunger, social disparity, and poverty, necessitates the need for entrepreneurial development in Nigeria (Abdullahi et al., 2022).

Similarly, the government mandated entrepreneurship education in tertiary institutions through monitoring ministries and higher education institutions to achieve that goal (Agwu et al., 2017; Akarue & Adogbeji, 2014). However, the search for white-collar jobs and the country's high unemployment rate indicates that Nigeria's educational system lacks a critical component for avoiding the country's high unemployment rate (Emeh, 2012). Effective learning and teaching methods of entrepreneurship by entrepreneurship lecturers instill entrepreneurial competencies, skills and attitudes in students, motivating undergraduates for new venture creation (Fernando & Nishantha, 2019). Based on the preceding discussion and current realities, some gaps exist between developing student entrepreneurship education and converting it into new

venture creation. Moreover, young graduates must develop the entrepreneurial culture, attitude, and entrepreneurial career inspiration required for new venture creation.

According to Onuma (2016), the visible unemployment issue has been one of the most worrisome problems confronting Nigerian unemployed graduates. Therefore, students must prepare for the challenges by acquiring the necessary entrepreneurial skill for new venture creation. Studies indicate that people who start a new venture believe they have the necessary knowledge and skills (Bosma, 2013; Townsend et al., 2010). Thus, students' self-efficacy can strengthen the linkage between entrepreneurship education and new venture creation. Individuals' self-efficacy beliefs influence their choices, the amount of work they put into a task, how long they persist in the face of setbacks and failures, how resilient they are to adversity, and the degree of their successes. (Bandura, 1986). Entrepreneurial self-efficacy (ES) is the extent to which people think they possess the right skills for starting a new business. (Brice Jr and Spencer, 2007; Naktiyok et al., 2010).

While there are studies on entrepreneurship education and venture creation, graduate

unemployment is rising. The available literatures on entrepreneurship education (EE) and venture creation (VC) in Nigeria have largely overlooked the potential moderating role of self-efficacy on these two constructs. While others have explored the impact of EE on venture creation and the role of self-efficacy in entrepreneurial success, there exists a gap in the literatures with regard to the extent to which self-efficacy moderates the relationship between entrepreneurship education and venture creation in Nigeria. This gap highlights the need for further research to understand the complex interplay between entrepreneurship education, self-efficacy, and venture creation in the Nigerian context. Such research can contribute to develop more effective entrepreneurship education initiatives that recognize the role of self-efficacy in fostering entrepreneurial success.

There is a call for studies in the area to enable policymakers, higher education students and managers to be equipped with entrepreneurship knowledge and skills to establish new ventures. Similarly, the current study contributes by introducing self-efficacy in the relationship between EE and VC as a moderator. Based on the preceding discussion, the study will be an attempt to seek answers to the following

questions: does self-efficacy moderate the relationship between EE and VC? Hence, the study aims to explore the moderating effect of self-efficacy on the said relationship. Despite the growing interest in EE and its potential to promote venture creation, there is limited understanding on the role of SE in this relationship. This study therefore, is an attempt to fill the gap. By identifying factors relevant to the success of EE programs and the creation of new ventures, this study may help to the design of effective EE education initiatives in Nigeria and other similar contexts.

2. Review of Related Literature

2.1 Venture Creation

Being a dynamic process of creation, vision and transformation, venture creation plays an essential role in developing any country's economy, leading to structural changes in the business landscape and society at large (Nzewi et al., 2017). Similarly, Abdul (2018) suggests that venture creation involves identifying business opportunities and skills needed to be taught through a practical approach. Many studies have linked venture creation with the effective acquisition of entrepreneurship education from formal educational institutions like universities and other higher learning

institutions (Alberti et al., 2004; Kirby, 2004). Thus, the university campus should serve as a playground or incubation center for entrepreneurial students who want to test their business concepts and transform them into successful business ventures (Olokundun et al., 2019). Scholars have expressed conflicting views on whether ventures are objective phenomena that exist independently (Shane & Venkataraman, 2000) so that the individual and venture depend on each other (Sarason et al., 2006). Also, academics in the fields of entrepreneurship, science policy, innovation, technology transfer, regional development, and business innovations based on university knowledge. (Rasmussen, 2005). From the preceding discussion, entrepreneurial education serves as a gateway to change of entrepreneurial mindset and behavior, leading to venture creations (Jabeen et al., 2017).

2.2 Entrepreneurship education (EE)

EE is crucial for preparing and expanding one's perspectives to become a creator, risk-taker innovator, venture owner and manager of economic resources. (Udoye & Mba, 2018). Thus, it promotes innovation, self-confidence or efficacy, and entrepreneur growth. Similarly, Okoye (2017) suggests that the main goal of EE is to enable

students to acquire creative thinking, original ideas, talents, and managerial competence to build and run successful companies and become independent. Evidence shows that entrepreneurship education is limited to formal learning; however, this gap must be bridged because entrepreneurship education is not limited to formal part of education (Agwu et al., 2017; Gorman et al., 1997). However, it can also be a life-long training process that does not require a formal educational establishment. Rather, it is based on a combination of formal and informal learning processes (Colardyn & Bjornavold, 2004; Strimel et al., 2014). Studies indicate that EE is a critical source of human capital and will play an important role in providing individuals with opportunities to improve their entrepreneurial abilities, dispositions, and limits leading to new venture creation (Baron and Ensley 2006; Hmieleski et al., 2015).

2.3 Self-efficacy

Self-efficacy is defined by Bandura and Walters (1977) as an individual's opinion of their capacity to organize and execute the actions required accomplishing different performance outcomes. The construct of self-efficacy has been commonly used as an individual difference variable in psychology

(Kickul & D'Intino, 2005). Through education and life experience, one gradually develops complex social, cognitive and linguistic skills (Gist, 1987; Bandura, 1982). Self-efficacy affects people's feelings, thoughts, behaviors, and motivation, according to Bandura's (1995) theory. Feelings are linked to a low sense of self-efficacy. According to the literature, developing task competencies and skills based on performance and accomplishments in the past boosts self-efficacy and encourages future performance and higher goals (Herron & Sapienza, 1992). Therefore, SE has significant practical and theoretical implications for entrepreneurial success since starting a business requires a specific set of skills and talents (Kickul & D'Intino, 2005).

2.4 Entrepreneurship Education and Venture Creation

Several studies have supported the positive linkage between EE and venture creation. For example, Agwu et al. (2017) suggested that aspects of EE like opportunity identification, leadership, innovative thinking and problem-solving have a substantial impact on the establishment of new ventures. Similarly, Entrepreneurship skills can be acquired through entrepreneurial outreach programs,

entrepreneurial educational scope, and vocational training (Jones et al., 2012; Agwu et al., 2017) and can lead to venture creation among the participating students after graduation. Again, Wahidmurni et al. (2019) indicate that entrepreneurial learning could motivate students to identify new venture opportunities.

However, Westhead and Solesvik (2016) also ask, whether universities that require entrepreneurship education for business students increase entrepreneurial intent leading to venture creation. Thus, students of entrepreneurship education have shown high goals, but not all participants benefited equally from the program. Moreover, female students who took entrepreneurial courses reported high intention far less frequently. The lack of comprehensive educational objectives, techniques, content, and resources necessary to facilitate the development of entrepreneurs for venture formation also undermines efforts and policies to encourage entrepreneurial attitudes and behavior among graduates. (Fayolle & Gailly, 2015; Finardi, 2013; Nabi et al., 2017, 2018). Despite these inverse views, studies confirm that university graduates were potential entrepreneurs, with a greater proclivity for new venture creation than non-graduates (Zainuddin, 2012).

Hence, the following hypotheses have been formulated:

H1: Entrepreneurship education is significantly associated with venture creation.

H1a: Perceived relevance and adequacy of course content is significantly related to venture creation.

H1b: Perceived facilitators' competence has a significant relationship with venture creation.

H1c: Perceived delivery method is significantly related to venture creation.

2.5 Moderating effect of self-efficacy

Many studies view venture creation as planned behavior (Al-Jubari et al., 2019), and SE is a key determinant and component of such behavior (Fuller et al., 2018; Ibrahim et al., 2019). Because entrepreneurship is a process that can help with SE and control of venture creation, the importance of EE is based on the idea that it can be learnt (Ahmed et al., 2017; Othman and Nasrudin 2016). Researches suggest that the social learning theory (Wood & Bandura, 1989; Bandura, 1982), which sees people's behaviors as the outcome of reciprocal causation among cognitive, behavioral, and

environmental variables, is the foundation for the concept of SE (Chen et al., 1998). Also, some scholars contend that EE and entrepreneurial SE are closely related (Dickson et al., 2008; Muofhe and Du Toit, 2011). Scholars contend that specialized teaching strategies used by entrepreneurship educators are essential for improving students' perceptions of their SE (Zhao et al., 2005).

Also, the starting a new business by graduates who studied entrepreneurship is directly related to SE (Blackford et al., 2009). The decision to launch a new enterprise and the efficiency with which those ventures are managed can be influenced by their level of entrepreneurial self-efficacy (Forbes, 2005). Students gain firsthand experience via case studies and role models, which increases their confidence in launching a new venture (Laviolette & Radu, 2008). Scholars maintained that EE positively impacts the antecedents of entrepreneurial self-efficacy (Fayolle et al., 2006; Guerrero et al., 2009) and promotes graduates to embark on new venture creations (Jones et al., 2008; Souitaris et al., 2007). In support of this study's use of SE to strengthen the relationship between EE and VC, much previous research used self-efficacy as

moderating effect with related constructs. For example, Sari (2016), Claudia and Murniati (2018) and Niemiec and Lachowicz-Tabaczek (2015). Hence, the study formulates the following hypothesis:

H2: Self-efficacy significantly moderates the relationship between entrepreneurship education and venture creation

H2a: Self-efficacy significantly moderates the relationship between perceived relevance and adequacy of course content and venture creation.

H2b: Self-efficacy significantly moderates the relationship between perceived facilitators' competence and venture creation.

H2c: Self-efficacy significantly moderates the relationship between perceived delivery method and venture creation.

2.6 Theoretical framework and research model

The Theory of Planned Behavior (TPB) and the experiential learning theory are the theories used to underpin this study. The theories assume that behaviors are affected by a combination of three factors and are subject to change. Attitude toward the behavior, subjective norms, and perceived behavioral control are the three factors assumed (Ajzen, 1991). According to the TPB, any intention to engage in any behavior explains the behavior. According to

Fishbein and Ajzen (1975), a person's desire to engage in a specific or certain behavior or activity depends on the three factors as mentioned before (ATB, SB and PBC). TPB posits that people's deliberate behaviors are direct result of ATB, SN and PBC and as such it establishes a link between intention and behavior. According to the theory, an individual's intention to engage in a given behavior increases when ATB, SN, and PBC increase (Appiah-Nimo et al., 2018). Accordingly, it can be inferred from the TPB that students are more likely to take entrepreneurial activity that leads to the formation of new ventures if their ATB, SN, and PBC are more positive toward their entrepreneurial intention.

TPB assumes that an individual's intent to engage in a certain type of particular behavior such as venture creation is influenced by the three factors mentioned earlier. SE is a related construct that refers to a person's belief in their ability to perform a certain task or specific behavior successfully. In context of entrepreneurship, SE refers to an individual's belief in their ability to start and run venture successfully.

EE is often aimed at increasing individuals' knowledge and skills related to entrepreneurship. The TPB suggests that such education can positively influence

ATB, SN, and PBC, which, in turn, can increase the intention to start a venture. In addition, the TPB suggests that SE plays a critical role in the formation of behavioral intentions. Specifically, individuals with high levels of SE are more likely to have positive attitudes, perceive more support for their actions, and may have a higher sense of control over their behavior.

Therefore, the TPB supports the relationship between SE, EE, and VC by suggesting that entrepreneurship education can increase individuals' self-efficacy in starting and running a successful venture. By providing individuals with the knowledge and skills needed to succeed in entrepreneurship. Education can increase individuals' confidence in their ability to perform the necessary tasks. Higher levels of SE lead to positive attitudes towards entrepreneurship

which also increases the intention to start entrepreneurial activities. EE can also increase the perception of social support for entrepreneurial activities and the sense of control over the behavior, which, in turn, can increase the intention to engage in entrepreneurial activities.

The intention to start entrepreneurial activities strongly predicts actual VC, which suggests that higher levels of SE resulting from EE can ultimately lead to increased venture creation. In summary, the TPB supports the idea that EE can increase SE, which, in turn, can positively influence ATB, SN, and PBC, and ultimately the intention to start up entrepreneurial activities and VC.

Based on the foregoing, the study proposes the model in figure 1

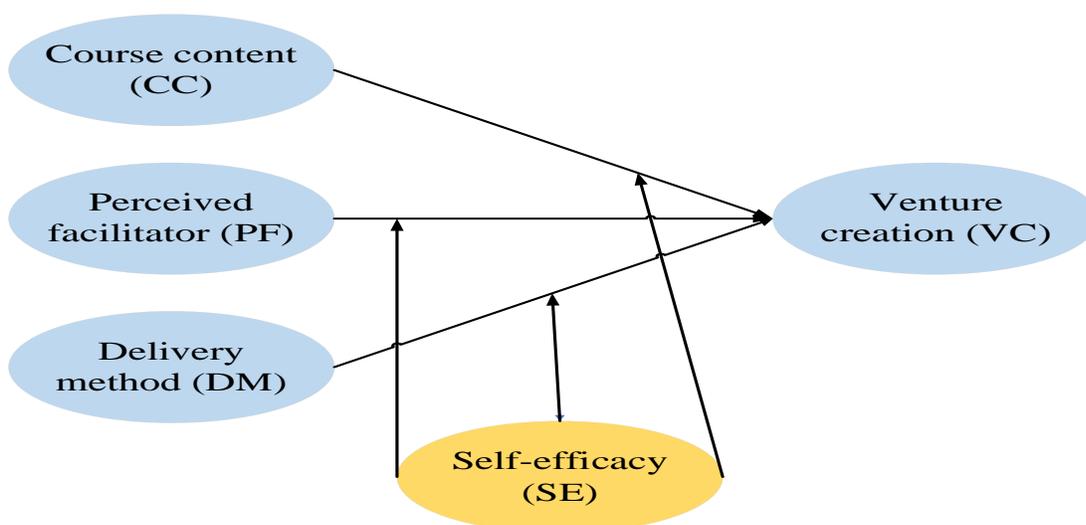


Figure 1: Proposed model

3. Methodology

The study utilizes a survey design to collect data from the respondents. The population of the study consists of level 400 students and graduates who have participated in the EE Program in the ten public universities across North-East and North-West regions of Nigeria. The population of the students is estimated to be more than thirty thousand (30,000) across the universities. Using Krejcie and Morgan (1970), the sample size is 379. Therefore, the research tripled the sample size to 1,137 to reduce sampling error and achieve more generalizable findings (Bartlett et al., 2001; Groves, 2006). From the 1137 questionnaires distributed, 326 are not correctly filled and subsequently dropped, leaving the study with 811 for the analysis. Convenience and snowball sampling procedures were used for the study. This is because the target population was difficult to access due to geographical, social, financial constraints. In such situations, researchers may opt for convenience sampling as it allows them to work with the available and accessible participants. The snowball method enabled the researchers to be connected with other respondents. The Partial Least Square Structural Equation Modeling is utilized with the aid of Smart PLS 4 to analyze the

data and test the hypotheses.

3.1 Measures

The independent variable, the EE program, is measured by course content, facilitators' competence and delivery method. The measures for perceived relevance and adequacy of the course content (CC) are adapted from Mwasalwiba (2010) using ten (10) items. Perceived facilitator competence (FC) is measured using eleven (11) items adapted from Jhang (2020) and Huang et al. (2020). Similarly, the perceived delivery method (DM) is measured with seven (7) items adapted from NIRAS and Thorgård (2008). The dependent variable, Venture creation, is measured using thirteen (13) items adapted from Gatewood et al. (1995). Finally, the moderating variable, students' self-efficacy, was measured using four (4) items developed by Zhao et al. (2005). The scale used to measure the constructs is a five-point Likert scale which range from strongly agree (1) to strongly disagree (5).

4. Results and Discussions

4.1 Reliability and Validity

This section presents and discusses the outer loadings results, AVE values and composite reliability of all the constructs under review. The decision criteria for outer loadings is 0.70, meaning indicators with loadings

below the threshold could be deleted if the deletion can increase the reliability of the constructs under review Hair et al. (2017). However, some scholars argued that outer loadings of 0.4 can be considered reliable in some cases. As shown in figure 2, the values of the AVE are within the range of 0.500 to

0.72, while the values for consistent composite reliability were also within the range of 0.66 to 0.90, and the Cronbach's Alpha values were within the range of 0.627 to 0.893, which shows that the constructs have convergent validity.

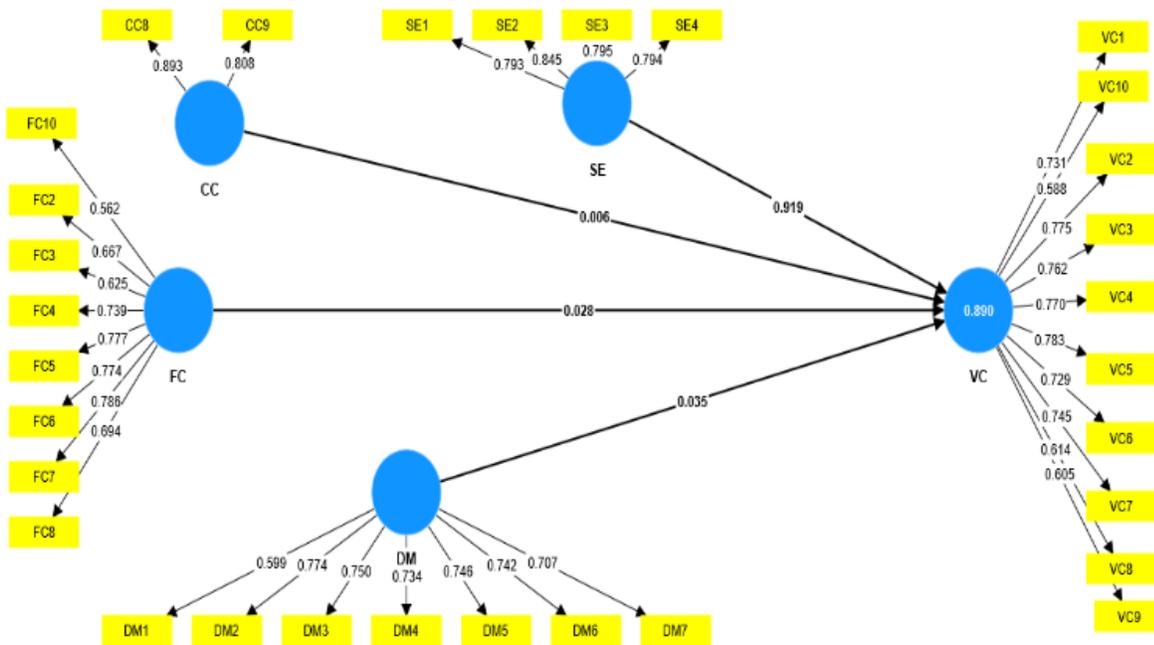


Figure 2: Measurement model

Figure 2 shows that three items (FC1, FC9 and FC11) from facilitator's competence are deleted because their outer loadings are less than the acceptable threshold. Similarly, three items (VC11, VC12 and VC13) are deleted from venture creation for a similar reason. Only two items are left for course content because their loadings were acceptable. However, no item is deleted

from the self-efficacy and delivery method because all their loadings are acceptable.

For the constructs discriminant validity, we use the Heterotrait-monotrait (HTMT) criterion. Henseler et al. (2015) state that HTMT is a superior ratio to the Fornell-Lacker and the cross-loading criterion due to its higher specificity and sensitivity rate.

Table 1: HTMT criterion

HTMT criterion	CC	DM	FC	SE	VC
Course content					
Delivery method	0.822				
Facilitators' competence	0.692	0.566			
Self-efficacy	0.457	0.349	0.379		
Venture creation	0.458	0.383	0.380	0.89	

Table 1 presents the HTMT ratio for the constructs. HTMT values close to 1 represent a lack of discriminant validity; hence scholars Kline (2011) and Gold et al. (2001) suggest a threshold of 0.85 and 0.90. Table 1 shows that the highest value of 0.822 is below the HTMT 0.85, indicating no multicollinearity among the variables, as

Gold et al. (2001) argued.

4.2 Structural model evaluation

This section presents the test of hypotheses, R-squared (R^2) and model effect size (F^2) values. The p-value at 5% level of significance is used to accept or reject the hypotheses, as depicted in Table II.

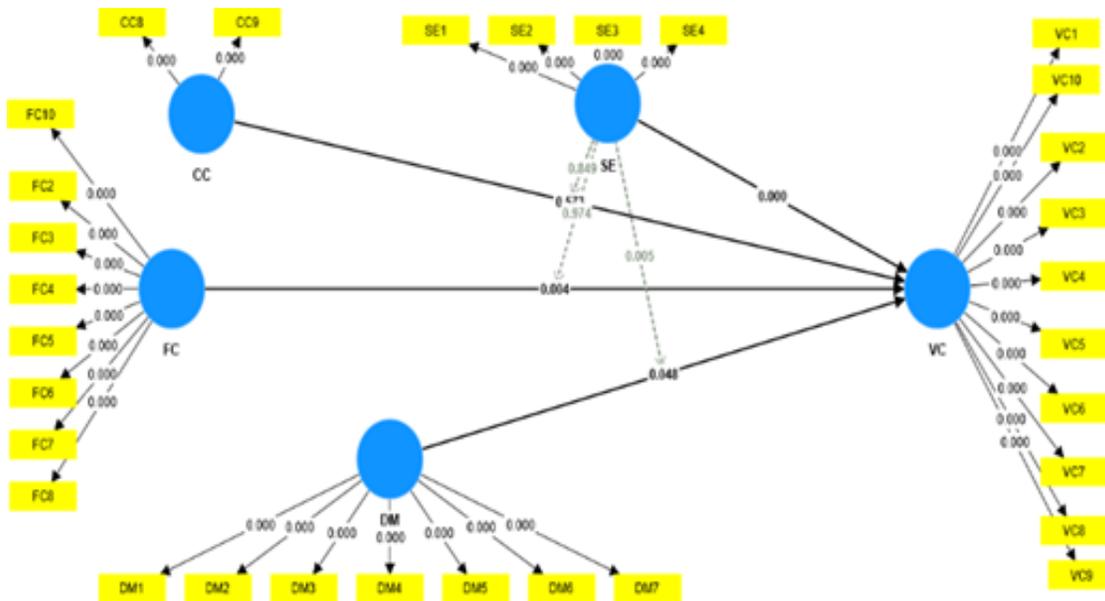


Figure 3: Structural model

Table II: Structural model results: Direct and indirect relationship

Relationships	Original sample (O)	S.D.	T statistics	P values	Decision
CC -> VC	0.01	0.019	0.563	0.573	Not supported
DM -> VC	0.035	0.018	1.979	0.048	Supported
FC -> VC	0.043	0.015	2.844	0.004	Supported
SE -> VC	0.92	0.007	123.73	0.000	Supported
SE x CC -> VC	-0.003	0.018	0.19	0.849	Not supported
SE x FC -> VC	0	0.015	0.032	0.974	Not supported
SE x DM -> VC	0.05	0.018	2.781	0.005	Supported

As depicted in both table II and figure 3, the relationship between perceived course content and venture creation among students is positive but insignificant, with a p-value of 0.573 and a beta value of 0.01. Perceived facilitators' competence and venture creation have a positive and significant relationship with a p-value of 0.04 and a beta value of 0.043. Similarly, the results reveal that perceived delivery method and venture creation among students have a positive and significant relationship, with a p-value and beta value of 0.035. This finding corroborates previous studies (Agwu et al., 2017; C. Jones et al., 2012; Wahidmurni et al., 2019), which have established a positive linkage between EE and VC. Furthermore, the results reveal that SE and VC have a positive and significant relationship with a p-value of 0.000 and a beta value of 0.92. It

is also found out that self-efficacy positively and significantly moderates the relationship between perceived delivery method and venture creation with a p-value of 0.005 and a beta value of 0.05. This finding is consistent with previous studies by Sari (2016), Claudia and Murniati (2018), Claudia and Murniati (2018) and Niemiec and Lachowicz-Tabaczek (2015), which use self-efficacy as a moderating variable.

4.3 Coefficient of Determination

According to Hair et al. (2016) and Chin (1998), R-square values of 0.25, 0.50 and 0.75 show small, moderate and large values, respectively. However, Falk and Miller (1992) recommends 10% as the minimum acceptable level of R² value that can be accepted. Table 4 shows the R² value for the study's model.

Table III: Coefficient of determination: R-squire

Construct	R-Squared
Venture creation	0.89

The R square value for the model is 0.89, which indicates that entrepreneurship education has explained about 89% of the variation in venture creation among students and graduates in Nigeria. This shows that the three dimensions of entrepreneurship education have collectively predicted venture creation. It also means that other factors that are not investigated in this study explain the remaining 11%.

4.4 Effect size (f^2) and Variance Inflation Factor

The effect size notated by f^2 value provides an overview of the effect of predecessor constructs on the outcome latent variable. The values for small, medium and large effects are 0.02, 0.15, and 0.35 respectively (Selya et al., 2012). The VIF indicates the absence or presence of multicollinearity.

Table IV: Effect size (f^2), VIF and Predictive relevance (Q^2)

Constructs	f^2	
	Venture Creation	Effect Size
Course content	0.00	Small
Delivery method	0.006	Small
Facilitators competence	0.005	Small
Self-efficacy	6.512	Large
VIF		
Course content	1.805	
Delivery method	1.762	
Facilitators comp.	1.59	
Self-efficacy	1.178	

From table 4, self-efficacy has a large effect, while course content, delivery method, and facilitators' competence have small effects on venture creation. The VIF values for all the constructs were less than 5 and as such no multicollinearity problem exists.

4.5 Implications

The study examines the moderating effect of SE on the relationship between EE and VC. The findings of the study have some implications. It implies that the ability of entrepreneurship lecturers to design curriculum-based entrepreneurial activities, like writing a business plan coupled with

excellent project management and coordination skills could help in energizing students and graduates to venture creation. It also suggests that, for lecturers of entrepreneurship education to motivate students to create new ventures, they must be able to leverage educational resources from inside and outside the University for Improved Entrepreneurial learning. The findings also suggest that lecturers should use multiple methods of assessment to evaluate students' learning and performance, and adjust, when necessary, based on the outcome of the evaluation. Therefore, the findings imply that entrepreneurship education programs should focus on enhancing individuals' self-efficacy beliefs, which can help individuals translate the knowledge and skills acquired through the program into successful venture creation.

In addition, the ability of entrepreneurship education lecturers to use case studies, venture simulation and online platforms during lectures significantly influences venture creation by students and graduates that have participated in the program. The study find that many students who were not opportune to be taught entrepreneurship by lecturers who use the above instruments were not motivated to create their ventures. In the same vein, students who are grouped

and assigned group projects by their EEP lecturers, embarked on company visits and listened to success stories from successful entrepreneurs were able to create their ventures.

However, self-efficacy did not have a moderating effect on the relationship between course content, facilitators' competence and venture creation among students of entrepreneurship education programs in Nigeria. This suggests that students' distinctive abilities and confidence to think, create, identify and commercialize new product ideas significantly contribute to venture creation by students and graduates who participated in the program. It also shows that such distinctive abilities and confidence can boost the relationship between the lecture delivery method and venture creation.

Therefore, policymakers and educators should design entrepreneurship education programs that include experiential learning activities, role modeling, and mentoring to enhance individuals' self-efficacy beliefs. Policymakers and educators should provide support for aspiring entrepreneurs to develop their self-efficacy beliefs. This can include providing access to role models and mentors, creating networking opportunities,

and providing financial support to help aspiring entrepreneurs start their ventures. Furthermore, collaboration and networking among entrepreneurs can help to enhance their self-efficacy beliefs, as they can learn from each other's experiences and gain support from peers. Therefore, policymakers and educators should encourage collaboration and networking among entrepreneurs through the creation of entrepreneurship communities, business incubators, and accelerators. Finally, a supportive entrepreneurial ecosystem can help to enhance individuals' self-efficacy beliefs and increase the chances of successful venture creation. Policymakers and educators should work together to create a supportive entrepreneurial ecosystem that includes access to funding, mentorship, business development services, and networking opportunities.

5. Conclusion

Self-efficacy is a vital factor to consider in the relationship between EE and VC in Nigeria. The findings indicate that individuals with higher levels of self-efficacy are more likely to translate the knowledge and skills gained from entrepreneurship education into successful venture creation. Therefore, it is crucial for

policymakers and educators to recognize the importance of SE and design EE programs that enhance individuals' self-efficacy beliefs. By doing so, Nigeria can create a more conducive environment for entrepreneurship and foster the growth of successful ventures that can meaningfully contribute to economic development.

Similarly, this study concludes that SE has strengthened the relationship between perceived delivery methods and venture creation among university students in Nigeria. Thus, self-efficacious students have appeared to be more disposed to creating new ventures when the facilitators' lecture delivery method was considered good. The study also concludes that facilitator's profile or competence, delivery method and self-efficacy are essential determinants of venture creation for university students and graduates. Therefore, the study provides theoretical and empirical support to the earlier assumption that SE could strengthen the relationship between EE and VC.

The findings of the study could help stakeholders in the education sector in Nigeria, especially the policy makers, in developing additional policies on teaching entrepreneurship courses among university students. The focus of those policies could

be shifted to giving special additional training to EEP lecturers across public universities to improve their entrepreneurship knowledge and skills as well as effective lecture delivery methods, which should involve the use of case studies, company visits and other technology-driven methods.

5.1 Limitations and directions for future research

We faced some limitations while conducting the research. At first, we had serious difficulties tracing students through snowballing because of the strike action of public university lecturers across Nigeria. This reduces the number of sample size that was originally envisaged to be used for the study.

Despite the challenge, the research manages to collect as much data as possible that could warrant analysis. Secondly, considering the limited time at our disposal, cross-sectional data were collected at a time that is still considered appropriate and acceptable. Future researchers can try using a longitudinal approach to assess the effects over a certain period.

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Impact of Entrepreneurship Education on Graduate Employability: Study in Federal Polytechnic Offa

By

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ABSTRACT

This study examines the role of entrepreneurship development as a catalyst for graduate employability in Kwara State Tertiary Institutions. The study's population is made up of graduating students from Federal Polytechnic Offa, Kwara State, Nigeria. A questionnaire is used to collect information from respondents. The collected data are analysed and the simple linear regression method of analysis is adopted. The study's findings provide evidence that mentoring and entrepreneurship education serve as catalysts for graduate employability. According to its findings, the variables here, is a significant impact on determining graduates' entrepreneurship development centers in Federal Polytechnic Offa Kwara State. This study also discovers that graduates, on the other hand, can only be successful if they are effectively mentored and trained through well-structured mentorship and entrepreneurship education and training programmes. As a result, the study concludes by recommending that policies aimed at promoting rapid and continuous graduate employability should be adopted in order to improve mentorship and training programmes.

Keywords: Entrepreneurship, Graduate Employability, Tertiary Institution

Introduction

The concept of entrepreneurship is essential for a nation's economic expansion and long-term development, as well as for the creation of jobs and the avoidance of economic crises. The dispute over entrepreneurship's role in society has existed since the 15thC, and it is still relevant today (Abdulhameed et al, 2021). Entrepreneurship has been established as a contemporary strategy for reducing unemployment and boosting employability in economies (Abusomwan,

2022). Young graduates of entrepreneurship-focused universities are increasingly expected to resolve their unemployment problems in recent years. This is true because entrepreneurship creates in graduating students an awareness of opportunity recognition and new business creation. It also includes entrepreneurial expertise. Olufemi (2019). Entrepreneurship is a process that equips people with the capacity to spot business opportunities as

well as the information, know-how, and attitudes necessary to seize them. Programs for entrepreneurship education and training are specifically designed to promote entrepreneurship, which is the ownership of an independent small firm. In both rich and developing nations, entrepreneurship is now a crucial tool for economic growth that helps raise the standard of living for the population and create jobs (Abubakar & Hazei, 2020).

Employers in Nigeria nowadays are more concerned with hiring and training qualified employees. The "skills gap," also known as the discrepancy between applicants' talents and those required for the job, is a serious worry for human resource managers and business owners trying to fill qualified positions. Although it is preferable for businesses to hire employees who are prepared for the job and have the requisite training, they are frequently willing to offer the specialized, industry-specific training required for those lacking such abilities. Entrepreneurship entails carefully identifying, assessing, and utilizing opportunities as well as introducing brand-new products to the market.

Employability rates are higher in developed economies with more entrepreneurial

activities Carl (2020). Studies show that entrepreneurship is a particular kind of deliberate and planned action that can increase economic efficiency by generating new employment opportunities, stimulating economic growth, and promoting innovation Shane.

More so, Obored and Nnebe (2020) observe that unemployment among Nigerian graduates has persisted as one of the major issues endangering the stability and growth of the country's economy. By requiring students in post-secondary institutions to take at least one entrepreneurship course before graduating, the federal government implemented a policy that will better prepare them to bridge the knowledge gap between theory and practice. By accepting the risk and reward associated with launching a new business, entrepreneurs seek business opportunities and mobilize resources to capitalize on them. The main goal of entrepreneurship is to launch a new firm by assembling the necessary resources.

As a result of this paradigm change in the establishment of the knowledge economy, Nigerian universities have expanded from their traditional instructional function to incorporate innovation and entrepreneurship, which are crucial factors in enhancing

development in a modern economy. According to research, tertiary institutions are crucial to the growth of entrepreneurship, to do this, the National Universities Commission and other regulatory bodies are urged by the Federal Government to integrate entrepreneurial studies into the curricula at all higher institutions. Increasing the amount of graduates (regardless of program of study) with entrepreneurial abilities and attitudes to be job creators rather than job seekers is the goal of NUC in implementing this strategy (Obong & Okoroma, 2021). The teaching environment in colleges is most significant for students' perceptions of entrepreneurial career progression and they are more inclined to start their own enterprises.

Similar to Nicole (2021), man, machine, money, materials, procedures, and management—which is typically the cornerstone to an organization's growth and longevity? In order to accomplish organizational goals, the entrepreneur serves as the coordinator, coordinating all other people and material resources. The entrepreneurial culture and spirit in a well-groomed entrepreneurial economy create an enabling environment for entrepreneurial development and expansion globally, particularly in industrialized countries where

innovation and entrepreneurship remain key instruments for economic progress (Mando, 2021).

According to Elimma (2018), undergraduates can be taught how to succeed in entrepreneurship regardless of their age or educational background in order to improve the economic development of the country. Since most youth in Nigeria do not engage in entrepreneurship and instead wait for the government to create employment opportunities, entrepreneurship has become a serious problem and has contributed too many of the country's problems. Without employment opportunities, youth will engage in social vices, which makes it difficult to maintain peace in Nigeria. Onu (2017), government should create a policy that will aid entrepreneurs in progress and offer the tools they need to do so. The element that influences entrepreneurship deters young people from starting their own businesses and being independent. The relationship between an entrepreneur and their surroundings aims to advance economic growth in the nation and determine whether local residents are knowledgeable about entrepreneurship.

According to Nwosu and John (2018), entrepreneurship education has been a

means of identifying business opportunities; assisting graduates—even those who dropped out of school—to acquire the necessary skills to be steadfast and independent, particularly to prepare them to launch their own businesses, manage them successfully, and reap the benefits. Universities in Nigeria offer solutions to the entrepreneurship education challenge after taking a good look at the issue. We learned that the country's one-man businesses and entrepreneurial expertise have become stronger, and that people will respect a person with entrepreneurial abilities more than someone who depends on government employment since they have access to freedom.

Abdulhameed and Afolake (2021), one-man businesses and income are likely to have a challenging connection. People with entrepreneurial skills and knowledge pay more attention to entrepreneurship because of its functions in the country and environment. Graduate employment and entrepreneurship development education play a crucial part in the country. The impact of entrepreneurship education on graduates' entrepreneurial behavior has drawn more attention from researchers. Entrepreneurship is creating wealth, growth, innovation, and job creation.

Entrepreneurship aids in the nation's economy recovering quickly. According to the research of Oladejo, et al (2016) and Darlene (2021), entrepreneurial development is the most effective treatment for the nation's hunger and poverty due to its ability to destroy people's lives and future aspirations. Universities must instruct their pupils on how to work for themselves. Entrepreneur is someone who is willing to take risks or lose money in business because risk is what business is all about. Entrepreneur need not be deterred because he must be informed before starting a firm an entrepreneur is someone who is driven to start something new without waiting for approval from the government, contribute to the growth of the nation, and generate employment possibilities for graduates in Nigeria. In a developing nation like ours, where the proportion of women in business is higher than that of men, there is a need for the government to lend more money to entrepreneurs who are starting new businesses. Bancy and Esther (2021).

Statement of the Problem

Nigerian young now experience high levels of unemployment, which contributes to societal vices. As a result, unemployment in Nigeria is a complex issue with many facets.

The employability of graduates is declining and unemployment is rising in Nigeria year after year as new graduates leave tertiary institutions to be greeted by a long line of their predecessors from various Universities, Polytechnics, and Colleges of Education who have not yet found employment and there are not enough jobs to go around for the large number of unemployed graduates in the nation. Carl (2021), provides that both undergraduate students and university instructors are increasingly aware of the significance of developing students' "employability skills" over the course of their undergraduate studies. Due to a lack of publicly accessible evaluation tools and comprehensive descriptions of efficient teaching procedures, the development of these crucial abilities is hampered. Evidence supports the use of active learning in small groups for the improvement of a number of soft skills that can be transferred, such as problem-solving, critical thinking, and teamwork.

The notion that the future is always unpredictable has gained a lot of traction in recent years in terms of educational policymaking, provides an introduction to the idea that the future is dangerous and uncertain, and the consequent focus on developing the skills needed to adapt to this

more unpredictable future. Nwosu (2017) they argue that placing too much focus on future uncertainty causes people to view education as an adaptation while downplaying the significance of the past. They also argued that this inhibits the development of abilities lauded by 21st-century skills frameworks and not just results in a limited view of schooling. According to trade economy figures from 2019, the projected 2 million graduates produced annually by Nigerian universities have contributed to the growth of many hired graduates who engage in robbery, abduction, and other societal vices or illnesses. Our graduates' unemployment is a worry for the country since they are frequently exploited as violent agents. The problem is getting worse because most job candidates are unable to get employment because they lack the fundamental and specialized knowledge required for their field of study, leaving them with no choice but to wander the streets in search of unattainable jobs. (Obong & Okoroma. 2002)

The development of soft skills, such as entrepreneurial skills, is a key component that policymakers from around the world have emphasized as the answer to the issue of high unemployment. Due to its

relationship with profit orientation, capital investment, and the development of new markets, several academics have suggested that entrepreneurship is responsible for economic expansion. (Schumpeter,1934). Schumpeter thinks that taking risks and being innovative are the core characteristics of entrepreneurship. So, only when fresh ground is genuinely broken by accepting risk does entrepreneurship exist (Abubakar & Hazri, 2020). Risk-taking is the propensity to engage in audacious behavior, such as forging ahead into uncharted territory or investing a significant percentage of one's resources in projects that may fail or substantially borrowing money. Oladojo, et al (2016). The degree of risk-taking refers to a person's propensity to act riskily when presented with risky circumstances. that a person's orientation toward taking chances in uncertain decision-making contexts can be used to determine their risk-taking propensity.

The term "creative pedagogy" has just recently started to be employed in modern teaching. However, the requirement to choose novel and imaginative methods of instruction ensured the establishment of "creative pedagogy" as a separate discipline within the pedagogical category. The history of pedagogy, general and professional

pedagogy, psychology, teaching strategies for private subjects, educational technology, and methodological concepts for topics like professional ethics form the basis of this subject. There are too many issues with entrepreneurship education in Nigeria, and there has been little to no effort put in to address them. Some time ago, some powerful people in the nation risked some worthwhile efforts to address such issues out of self-interest. Poor funding, unethical behavior, a lack of educational facilities, an unstable power supply, contradictory government laws, and bad practices all pose problems for entrepreneurial education. Although mentoring is a highly effective learning approach, it is not without difficulties, such as those related to preparation, communication, time commitment, or even the seasons themselves. Many businesses still believe that training is ineffective (or just partially effective) at achieving its objectives, despite careful resource allocation. This is typically due to a few widespread training problems (Waidi, 2021). The research question the study seeks to answer is “to what extent does entrepreneurial training affect graduate employability?”

Review of Related Literatures

Concept of Entrepreneurship Education

A set of academic programs or courses known as entrepreneurship education equip students with the entrepreneurial knowledge, abilities, and skills they need to get ready for a career Mando, (2021). Entrepreneurship education (EE) significantly affects young people's tendency to work in entrepreneurship. The fact that so many post-secondary institutions provide Entrepreneurship education (EE) demonstrates the viability of entrepreneurship education. In this study, the term "enterprise aspirations" Entrepreneurship education (EE) refers to students' modest plans to launch their own firms. Contrary to entrepreneurship education, which is described as a process that enables students to develop ideas and skills into workable commercial endeavors, entrepreneurship education (EE) is a separate discipline Entrepreneurship education (EE) makes use of these abilities to start a new business. In this way, Entrepreneurship education equips students with greater skills, knowledge, and capabilities to launch a new endeavor—typically a business. Secondly, while business education can be provided in any field, it is only provided as a module,

course, or program that focuses on the creation, administration, and growth of a new business Williamson, Beadle and Nwosu and John (2017), refer to "Entrepreneurship education (EE)" as what gives students the know-how and practical experience they need to adopt a favorable mindset toward startups and view independent work as a legitimate career option.

There are three different types of business education. Initially, business and development training for aspiring and experienced businesses is the main focus of entrepreneurial education. It focuses on enhancing knowledge and abilities to ensure the company's survival, expansion, and future development Darlene, (2021). Secondly, it provides students with knowledge of and skills for working in the business world and for managing small businesses. It has a clear goal of educating students about many aspects of business development and management, primarily conceptually, and it also focuses primarily, on developing awareness. The majority of these courses use traditional teaching methods, like lectures, textbooks, and essays, and they are scored using assignments and written final exams or module exams. These programs may

encourage students to pursue employment as a profession. Thirdly, business education emphasizes preparing and developing abilities as well as comprehending the existing processes involved in establishing, operating, and creating new firms Obong and Okoroma, (2021). It is encouraged for participants to create and run their own businesses.

Through self-directed experiential learning, these courses provide instructional activities that support the growth of entrepreneurial knowledge, skills, and attitudes. These programs provide Examples of practical education activities include project learning, experience, placement in a small firm, suitable job, and a stimulating entrepreneurship. The many entrepreneurial approaches suggest that "no one size fits all" in light of the aforementioned. When creating a module, course, or program, it is essential to take the desired learning results / objectives, as well as the contents and methods of learning into consideration Andrew, (2019).

The key to a successful Entrepreneurship education (EE) is the finding of the most efficient way to manage learning skills and the best way to match students' needs and teaching strategy, John and Jonathan,

(2018). Because entrepreneurship education (EE) is defined as knowledge and skills on how, by how, and with what, this study focuses on entrepreneurship education, for whom and what can be utilized to develop future goods and service. Additionally, the fundamental question of why entrepreneurship should be taught in relation to the concepts of what, how, and who can be taught entrepreneurship is still a topic of discussion. There have been two streams of rationality. First, Entrepreneurship education (EE) helps students develop more businesslike skills to better prepare them for the challenging and uncertain world of employment

Second, Entrepreneurship education (EE) encourages people to improve their capacity for conceptualizing, analyzing, and seizing possibilities for business. In response to the question of how entrepreneurship may be taught, several scholars asserted that entrepreneurship is something that can be learned through experience. Abdulhameed, Amina, Kehinde and Afolake, (2021).

However, Universities and tertiary institution should put more extra effort in redesigning their learning and institutional materials for better learning. An endeavor that goes beyond the duration and scope of a

school's academic business capabilities is "...to train people to become more enterprising, but also entrepreneurs and women..." Therefore, according to a number of academic authorities, entrepreneurship theory and practice are inextricably linked, it is important to distinguish between educating entrepreneurship as a profession (teaching, i.e., vocational domain) and how it affects other phenomena in Entrepreneurship education (EE). one strategy for incorporating more academic information into entrepreneurship classes is to ask students what they should do and why Abusomwan, (2022). As a result, a university must first master theory before attempting to immerse students in practice. Once the theory is learned, the practice will acquire a whole new level of significance. Recent research suggests that graduates with EE backgrounds are more likely to begin start-up businesses and become entrepreneurs. It was stated that "the Entrepreneurship education (EE) can affect the academic or student's thinking and behaviour."

In a study of 250 university students, it is discovered that the majority of students are supportive of Entrepreneurship education (EE) and preferred businesspeople as their future employers. Between teaching

entrepreneurship as a profession (teaching, i.e., vocational area) and teaching and how it affects other phenomena, claim that the purpose of the is to provide graduates with the skills they need to engage in businesses that generate income, both in the public and private sectors, whether or not they are able to get paid employment. Young people must be given the opportunity to develop their own character through practical knowledge and skills (attitude and perspective) (attitude and vision). Entrepreneurship education encompasses all initiatives to promote entrepreneurship, attitudes, and abilities across a range of domains, including idea generation, startups, growth, and innovation. According to Adebayo, (2022) entrepreneurship education and training programme aims directly at stimulating entrepreneurship which may be defined as independent small business ownership. Entrepreneurship has become a vital developmental tool used in developed and developing countries that create jobs and improve standard of living of the populace. The environment must be free from hazard within the territory of encouraging government policy to make it a reality, government should allow entrepreneurs to participate in commercial activities in order to boom nation economy. For entrepreneurs'

success and development, it is recommended that any business should register (Abubakar & Hazeri, 2020).

Entrepreneurship is the process of providing individuals with the ability to recognize commercial opportunities and the knowledge, skills and act on them. Entrepreneurship education helps entrepreneurs to aim directly through his skills and knowledge by having small business venture to achieve great opportunities around him. The importance of entrepreneurship education implemented in universities concerns two groups of people which are students and staff in universities (Mando, 2021).

The Federal Republic of Nigeria 2014, in the National Policy on Education provides five main objectives as stated in the second national development plan; The third, fourth and fifth objectives are in line with goals of entrepreneurship education, the united and self-reliant nation, a great and dynamic economy and a land of bright and full of opportunities. Entrepreneurship education offer graduates some great opportunities to be self-reliant. Every nation education sectors are saddled with responsibilities geared towards transforming many sectors

of the national economy. Obong and Okoroma, (2021).

Oladejo, Oba, Adekunle&Kazeem (2016), declare that undergraduates have established cordial relationship with stimulation of national development through economic growth, employment generation and empowerment of disadvantage segment of population which include lack of job creation. The excessive hunger and poverty have devastated lives of people in the nation and future ambitions, academician prescribing graduates in Nigeria have led entrepreneurship development as the paramount cure for hunger and poverty of the nation. Entrepreneurship education has been identified as a major means of helping graduates to acquire skills, knowledge and capacity to be self-employed, through the acquisition of knowledge, skills, ability and good character is very importance to become a valuable part of the workforce? In addition, with their unique position within the nation, universities have also had a vital role to play in the advancement of the achievement of the sustainable development goals.

The entrepreneurs call for an investigation into role of the educational background and academic qualifications of their founders in

leading to their success defined project undertaken by entrepreneur as the phenomenon in which project undertaken by entrepreneur and their supporting elements interact in an environment that is built to foster these project development and growth while some countries around the globe have become viable project undertaken by entrepreneur (Tripathi et al, 2019).

The Covid 19 pandemic has led to a major transition and to a growing dominance of project undertaken by entrepreneur globally. These entrepreneurs can create major job, enhance innovations and support national economic growth. In order for the entrepreneurs to grow, they must be supported through a regulatory environment, access to resources, true multi-stakeholder involvement, public-private collaboration, and membership networks that nourish innovators. (Sama'a, Yasmina & Nasser, 2021).

Globally, nurturing care framework developed from the 2016 Early Lancet childhood development series. World health organization adopts the nurturing care framework organization as an evidence-based road map for country to follow and implement effectively. However, good monitoring and evaluation of nurturing care environments for instance, good health,

adequate nutrition, opportunities for early learning, security and safety, respond to good care are key for nation to be able to properly implement the nurturing care framework and attaining the sustainable development goals are strongly needed. (Rafael, Sonia & Gabriela, 2022).

Employability

The concept of employability is still used in a variety of contexts and by both job seekers and employed people. As a result, while giving the term "employability" a simple dictionary definition such as "the quality of being employable", creating a useful definition which requires much more work. Employers frequently give preference to a candidate's employability, which is somewhat understandable.

The UK government has coined a phrase, like the US government, that highlights people's skills while also highlighting that government employability advancement is a priority. All people that are able to work are encouraged to obtain the skills necessary to engage in and maintain employment throughout their working lives this is what is meant by the creation of skill- and adaptability-based workforces (HM Treasury, 1997). Other definitions of the term have suggested a more thorough

approach, emphasising the impact of both human characteristics and the conditions of the labour; market, that is, both components of labour demand and supply. The Labour Force Development Board of the Canadian government provided the following definition:

Employability measures a person's potential to find meaningful work given the interaction between their personal circumstances and the labor market. (Canadian Labour Force Development Board, 1994, p. viii).

The Northern Ireland Executive's research has also specifically recommended for a broad working definition of employability.

The ability to enter and function in the labor market as well as the capacity to reach one's full potential through stable and reachable employment are both components of employability. An individual's employability is influenced by their attitudes, knowledge, and skills as well as by how they present themselves on the job market, the social and environmental context of their employment search, and the economic climate in which they are looking for employment.

Additionally, employability implies that people having the aptitude to gain the required abilities would not always be able

to do the required work right away or without extra training (Cox & King, 2006).

Theoretical Framework

The 1960 McClelland theory for need achievement addresses the notion by defining what is needed, dissecting what is needed, and giving potential solutions. Number of age, sex, color, or culture, we all have one of these wants and are motivated by it, which is how the idea is advanced. It further asserts that as a result of their experiences in life, each person gradually evolved their own special criteria. They can take into account Abraham Maslow's hierarchy of needs, which held that everyone had three different types of motivational needs independent of demography, culture, or wealth. Therefore, these motives are affected and molded by actual life events (David, 1961).

Concerned about the causes and consequences of economic expansion, plagued McClelland, looks for "human values and incentives that push man to seize opportunities, to take advantage of beneficial trading conditions" in this instance, or internal factors. Because of this, he stresses the inventive traits of the entrepreneurial role. The entrepreneur places a high value on success. Atkinsu, (1974)

coins the phrase "n-achievement", which refers to "a desire to perform well, not so much for the sake of societal acclaim or position, but for the sake of an inner experience of personal success." This drive to accomplish goals directs an entrepreneur's efforts. It is ideal to encourage n-achievement among people to ensure quick economic growth since people with high n-achievement demonstrate entrepreneurial behavior.

In actual sense, child-rearing practices that prioritize high standards, material comfort, independence, education, and less paternal domination inculcate the n-achievement incentive. McClelland identifies two characteristics of entrepreneurs. Firstly, it puts in new and improved techniques into practice. Secondly, it makes choices in the midst of uncertainty. This drive is also known as the tendency to put in extra effort when one's performance is measured against a standard of excellence. Successful business owners are more likely to have strong aspirational demands. According to McClelland, those with a high need for achievement won't be motivated by monetary reward, rather money will be seen as a symbol of success by them. Similar to this, their major priority is personal success and achievement, rather than societal

approval or prestige. McClelland recommends parents to set high expectations for their kids in order to improve their drive for success. Studies on the psychological roots of entrepreneurship show that high accomplishment orientation promotes the success of entrepreneurs.

However, it is questioned as to how many of the individuals who are considered to have high n-achievement would be effective in applying them in the contemporary developing world without the backing of other reinforcing variables. McClelland's empirical conceptions are shown to be extremely problematic. Because motivated individuals are more productive, the ability to motivate people is essential in today's business. However, motivational tactics must be modified as a result of employees' increased demands and attention to their requirements. The strongest influence on motivational tactics has likely been the values and concerns of the workforce. Any strategy used to urge staff employees to participate and change voluntarily is a motivating technique. The only assertion made by this theory is that managers who want institutional power are more effective because they may create fictitious conditional authority at work

Empirical Review

In his work titled *Qualitative Study Investigation*, Elima (2018) argues that governments and policy makers should spend more money on entrepreneurship education to boost graduates on skill how their lack of technical proficiency will affect their prospects of changing jobs and opportunities. The study came to the conclusion that a review of the curricula in tertiary institutions was necessary to clear the way for a functional curriculum in the nation. The study came to the conclusion that there is not a shortage of employment opportunities, but rather a variety of issues, including graduate work opportunities being limited by their lack of skills and competence

Olommy (2018) investigates youth employment, education, and entrepreneurship in Nigeria as a means of gaining access to target number eight in that country. In order to improve on the overall empathy for addressing unemployment in the nation, the report employs qualitative research. By demonstrating the interaction of ages and the wonderful tendencies of positive development contribution, it exposed and brought more light on the relationship between youth and education, employment, and entrepreneurship. According to a study

by Mamlyn and Kun-yin (2018), who use an online survey to collect data from 338 students in five secondary schools between the ages of 13 and 16, the treatment group showed significantly higher levels of entrepreneurship alertness and efficiency compared to the control group. Of the 338 students, 34% are male and 65.2% are female. The study's conclusion—which supported the evidence from secondary school students' experiences—is that the more entrepreneurship training, the better.

Additionally, Nwosu and Henry (2018) state that there are a number of problems hindering the performance of entrepreneurship education in Nigeria that positively affect the employability of Nigerian graduates in their profession using a new methodology approach to the literature study. The study gives insight and solutions that will assist the nation's entrepreneurship education improve and produce graduates who will create jobs rather than look for employment. Lausun and Jonathan (2011) look at the impact of organizational justice, work satisfaction, and entrepreneurial aim on the staff and students' commitment to the organization at Babcock University. Job satisfaction and organizational justice are the most important and powerful factors for organizational commitment, according to the

study's quantitative approach, which includes a questionnaire given to staff and students. Employees' intentions to leave their jobs will be influenced by entrepreneurs' intentions, according to the study's findings.

In their study of the role of entrepreneurial talents in the operational performance of outdoor catering operations in Nairobi, Kenya, Moreso, Esther, Bancy, and Mgurin (2021) observe, by choosing 30 outdoor catering MSEs from a population of 300 for the study and using descriptive survey analysis such as percentage and frequency count, they adopt a quantitative approach, the result demonstrates that there is the evidence of a high skill base that is involved in business ventures. The study concludes that developing entrepreneurial abilities would enhance one's business acumen and that the MSE industry needs to foster an entrepreneurial culture through its educational system.

Also, Mukra, (2017) explores empirical findings on entrepreneurship in the area of engineering career from student perspective. The study ex-rays factors that motivate entrepreneurial activities and 168 students form the data collection and analytical tools. The study finds that decision making skills,

risk taking capacity, creativity and communication skills and ability to prepared business plan are needed for entrepreneurs to succeed in their daily endeavor.

Additionally, Bethany, et al,(2020), observe that entrepreneurship education has the potential drive and delay relevant working curriculum. It uses the literature review on the entrepreneurship education pedagogy in order to understand the positive impact of entrepreneurship programmes on students and its possibilities of creating opportunities to self and the economy at large. Their paper examines 45 studies across nine countries that suggested entrepreneurship as the positive tools for national development.

Chinendu, et al (2015), observe the innovativeness of youth and tools for empowerment in the selected Local Government in Enugu state. The study adapts quantitative research with all relevant statistical data that are analysed using **peason** moment calculation coefficient that shows the link with dependent and independent variable. Their submission and outcome shows no link of innovativeness and empowerment but record that government should gently recognized the essence of entrepreneurship in job creation and innovation to economy development.

Summarily, Jacob, et al (2021) note that entrepreneurship education has a positive impact on unemployment reduction among graduates in any given nation. The study adapts quantitative research using 195 students of business administration and entrepreneurship department and convenience sampling techniques was suitable for the selection of respondents. Finding shows that skills acquisition has positive effect on unemployment reduction and entrepreneurship empowerment which contribute to poverty reduction, economy development and improved standard of living.

Methodology

The research design is a planned and structured of investigation to obtain answers to the research questions. For the purpose of this research, the study makes use of survey research design to collect data through questionnaire in order to gather in-depth knowledge of Impact of Entrepreneurial Training on graduate employability in Federal Polytechnic Offa, Kwara State, Nigeria. The population constitutes of 1380 graduating students in Federal Polytechnic Offa Kwara State. The study samples 100 graduating student in Federal Polytechnic Offa, Kwara State as the case study using

Krajcie and Morgan (1979) sample size table.

The method of data collection is through questionnaire administration. The questionnaire is designed and structured in a manner that captured all the variables under study as adopted from Mukra (2017). The questionnaire is structured in a way that is very easy for the respondents to give their views on the subject of discourse. The questionnaire has four-parts: section (A) respondent's Biodata Section (B) case study instrument background, section (C) dependents variables and section (D) independent variables. The questionnaire was prepared using a 5 point Likert scale approach. In order to manage respondents, view of the length of the questionnaire will be taken into consideration and participants will be asked to indicate their level of agreement on the 5-point Likert scale with the following rating; Strongly Disagree (1) Disagree (2) neutral (3) Agree (4) and Strongly Agree.

The collected data are sorted according to different categories before processing the responses. The data from questionnaire were distributed for completeness, for analysis using multiple regressions for Statistical Package for Social Services (SPSS). The

statistical tools are aligned with the objectives of the research and inferential statistics was used to show the relationship and the strength of degree as well as direction of association between variables. The other inferential statistics that was used is multiple regression analysis which shows independent, interdependence variable and dependents variables. Then ANOVA is used to analyse the stated hypotheses, thus, both the strength of the relationship between variables and the effect of the dependent and independent variables and the statistical

significance are assessed (Alexander, Susan & Michael, 2018).

Test of hypothesis

Hypothesis one:

H₀: Entrepreneurial training has no significant impact on graduate’s employability.

In testing this research hypothesis, the data collected are statistically analyzed using multiple regression analysis and Pearson Correlation Coefficient as shown in Table 8.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.770 ^a	.594	.589	1.71594

a. Predictors: (Constant), Entrepreneurial training

Table 1 indicates that the correlation coefficient showing the association between the predictor variable (Entrepreneurial training) and its impact on Graduate employability is 0.770. The adjusted R squared is 0.594. This means that the

predictor variables accounted for 59.4% variation in the impact of entrepreneurial training Graduate employability which shows that there was high degree of relationship between the variables involved.

Table 2: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	408.504	1	408.504	138.737	.000 ^b
	Residual	279.723	95	2.944		
	Total	688.227	96			

a. Dependent Variable: Graduates Employability.
 b. Predictors: (Constant), Entrepreneurial training.

The results on the Analysis of Variance (ANOVA) for the model as revealed in Table 3 was ascertained, using simple regression with decision rule which states that reject H_0 if $F_{cal} > F_{tab}$ otherwise do not reject. Therefore, $F_{cal} = 138.737$ and ANOVA $F(1,95) = 3.09$.

Decision: Since $F_{cal} > F_{tab}$ (i.e. $138.737 > 3.09$), therefore the null hypothesis is

rejected with the conclusion that there is a significant linear relationship between the predictor variable (Entrepreneurial training) and its impact on graduate employability.

Based on this significant relationship, the coefficient for the Beta weight for the amount of standard deviation unit of change in the dependent variable was calculated.

The result is as shown in Table 3

Table 3: Coefficients^a

Model	Unstandardised Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.519	.698		2.175	.032
Entrepreneurial training	.730	.062	.770	11.779	.000

a. Dependent Variable: Graduates Employability.

The Sodel specifications become:

$$Y = B_0 + B_1(\text{Entrepreneurial training})$$

$$Y = 1.519 + 0.730 \text{ Entrepreneurial training}$$

The standardised coefficients in Table 6 revealed that:

- a. the independent variable, entrepreneurial training value, has positive effect on the graduate employability with Beta value of 0.770;
- b. it also shows that, there is a statistically significant relationship because the p-value (0.032) is less than 0.05.

Decision Rule: Reject H_0 if p-value is less than level of significance otherwise does not reject.

Result: p-value = 0.032

Level of significance = 0.05

Decision: Since P value (0.032) is less than the level of significance, i.e. ($0.032 < 0.05$) rejects H_0 and conclude that there is a significant relationship among entrepreneurial training and graduate employability.

Hypothesis two:

H_0 : Nurturing has no significant impact on graduate employability

In testing this research hypothesis, the data collected are statistically analysed using

multiple regression analysis and Pearson Correlation Coefficient as shown in Table 4

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.212 ^a	.045	.035	.98486

A. Predictors: (Constant), nurturing.

Table 4 indicates that the correlation coefficient showing the association between the predictor variable (nurturing) and its impact on graduate employability was 0.212. The adjusted R squared is 0.045. This means that the predictor variables accounted

for 4.5% variation in the impact of nurturing on Graduate employability which shows that there is low degree of relationship between the variables involved.

Table 5: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.349	1	4.349	4.483	.037 ^b
	Residual	92.146	95	.970		
	Total	96.495	96			

a. Dependent Variable: Graduates_Employability.

b. Predictors: (Constant), nurturing.

The results on the Analysis of Variance (ANOVA) for the model as revealed in Table 5 is ascertained using simple regression with decision rule which states that reject H_0 if $F_{cal} > F_{tab}$ otherwise do not reject. Therefore $F_{cal} = 4.483$ and ANOVA $F(1,95) = 3.09$.

Decision: Since $F_{cal} > F_{tab}$ (i.e. $4.483 > 3.09$), therefore the null hypothesis is

rejected with the conclusion that there is a significant linear relationship between the predictor variable (nurturing) and its impact on graduate employability.

Based on this significant relationship, the coefficient for the Beta weight for the amount of standard deviation unit of change in the dependent variable was calculated. The result is as shown in Table 5.

Table 5 for (Nurturing) and the impact on graduate employability in selected Tertiary

Institutions in Coefficients in Kwara State.

Table 6: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.523	.298		8.460	.000
Nurturing	.315	.149	.212	2.117	.037

a. Dependent Variable: Graduates Employability

The model specifications become:

$$Y = B_0 + B_1(\text{Entrepreneurial training}).$$

$$Y = 2.523 + 0.315 \text{ Nurturing}.$$

The standardized coefficients in Table 13 revealed that:

- a. The independent variable, nurturing value, has positive effect on the graduate employability with Beta value of 0.212.
- b. It also shows that there is statistically significant relationship because the p-value (0.037) is less than 0.05.

Decision Rule: Reject H_0 if p-value is less than level of significance otherwise does not reject.

Result: p-value = 0.037

Level of significance = 0.05

Decision: Since P value (0.037) is less than the level of significance, i.e. (0.037 < 0.05) rejects H_0 and conclude that there is a significant relationship among nurturing and graduate employability.

Discussion of findings

From the results and discussion above shows that hypothesis one confirmed significant relationship between the predictor and the dependent variable. The null hypothesis was rejected and concludes that the independent variable, Graduate employability value has strong positive effect on the Nurturing with Beta value of 0.534, it also shows that there is statistically significant relationship because the p-value is less than 0.05.

Also, hypothesis two (2) shows that , the independent variable, Graduate employability value has strong positive effect on the Entrepreneurial Training with Beta value of 0.679, it also shows that there is statistically significant relationship because the p-value is less than 0.05 null hypothesis two was rejected and concludes that entrepreneurial training significantly influence graduate employability in Kwara State.

In the same vein, hypothesis number (3) confirms a strong positive impact on Graduate employability. The independent variables, which is Graduate employability value has a strong positive effect on the Entrepreneurial Training with Beta value of 0.813. It also shows that there is statistically significant relationship because the p-value is less than 0.05.

More so, hypothesis number 4 entrepreneurial education shows significant impact on graduate employability that enhances graduate confidence by putting them in the right track for job creation and sustainability of skills acquired during the process.

Conclusion

The study concludes that there is a significant relationship between entrepreneurial training and graduate employability as well as nurturing and employability among graduating students of Federal Polytechnic, Offa, Kwara state.

Recommendations

The following recommendations are made based on the findings and conclusions.

The paper recommends that the government at all levels should increase their efforts in formulating policies and implementation on entrepreneurship development centres for training that are open for all graduates to explore in order to achieve success, growth, and sustainability of their respective firms.

Furthermore, government should increase carrying capacity in entrepreneurship development Centre's facilities to allow for more graduates that will enroll in entrepreneurship programmes, as nearly all graduates complain about shortages of spaces to admit new entrepreneurs.

There is also a need to redesign the nurturing and training programmes and policies for effective and efficient concept assimilation by graduates. Similarly, the study recommends, that entrepreneurs should use entrepreneurship development facilities as instrument to develop their business for better performance, success, and growth, as this will help graduates create more job opportunities for themselves and the masses. This of course, as things being equal, will have a multiplier effect on the economy.

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Impact of Risk Pooling Strategies on Smallholder Farmers' Access to Agricultural Insurance in Jigawa State.

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ABSTRACT

This study examines the efficacy of risk pooling strategies for enhancing smallholder farmers' access to agricultural insurance in Jigawa State, Nigeria. Utilizing a cross-sectional survey of 389 farmers insured by the National Agricultural Insurance Corporation (NAIC) from 2019 to 2022, descriptive statistics and regression analysis were employed to explore the adoption and effectiveness of risk pooling mechanisms. Findings reveal a positive relationship between engagement in risk pooling and its impact on farmers' access, highlighting the significance of community-based initiatives and tailored insurance schemes. The study underscores the relevance of effective risk management for the agricultural sector and provides insights for policymakers to enhance insurance access amid uncertainties. Implications include the positive correlation between risk pooling engagement and its impact on smallholder farmers, suggesting community-based approaches can bolster resilience. Key recommendations include promoting community-based initiatives, tailoring insurance schemes, formulating robust policies, and considering the local context for effective risk management. This research contributes to enhancing the resilience and well-being of smallholder farmers, fostering sustainable development in the agricultural sector.

Keywords: risk pooling, agricultural insurance, smallholder farmers, community-based initiatives, Jigawa State, Nigeria.

1. Introduction

Agricultural insurance stands as a vital shield against the multitude of risks that smallholder farmers encounter, including

crop failure, pest infestations, adverse weather conditions, and market volatility (World Bank, 2010). These uncertainties

often result in substantial financial losses, imperiling the livelihoods of small-scale farmers. However, through insurance coverage, farmers can transfer these financial risks to insurance companies, establishing a safety net against unpredictable events (Skees et al., 2011). Furthermore, agricultural insurance serves to incentivize investment in farming by mitigating perceived risks, fostering the adoption of advanced practices, technologies, and inputs (Hazell et al., 2010). This, in turn, contributes to heightened productivity, enhanced food security, and poverty reduction within farming communities.

The National Agricultural Insurance Corporation (NAIC), established in 1987 under the Federal Ministry of Agriculture and Rural Development, plays a pivotal role in providing tailored insurance services to smallholder farmers in Nigeria. These services include Weather Index-Based Insurance, Crop Insurance, Livestock Insurance, and Agricultural Micro-insurance, all aimed at mitigating risks specific to agricultural activities (NAIC, n.d.). Within Jigawa State, the NAIC office assumes a critical role in addressing the insurance needs of smallholder farmers,

thereby enhancing their resilience to adverse events.

Risk pooling emerges as a central strategy to enhance the accessibility and affordability of agricultural insurance for small-scale farmers in Jigawa State. Collaborative risk-sharing mechanisms, facilitated by initiatives such as farmer groups or cooperatives, present an economically viable approach and a safety net for recovery in times of distress (Ahmed et al., 2020). Despite the promising outcomes associated with risk pooling, there remains a gap in research concerning its long-term effectiveness, the role of social capital, trust dynamics, and gender considerations within the context of agricultural insurance in Jigawa State. Addressing these gaps is essential for informing policymakers and practitioners on strategies to optimize risk pooling mechanisms and ensure equitable access to agricultural insurance for smallholder farmers.

Drawing from recent scholarship, Barral (2023) explored risk management within the Common Agricultural Policy (CAP), focusing on the growing challenges posed by economic, environmental, and sanitary hazards in European agriculture. Her study highlighted the historical evolution of risk

management strategies, noting a shift towards private instruments and market-oriented approaches. This transformation coincided with increased integration into international markets and regulatory reforms aimed at reducing direct intervention. The study emphasized the importance of understanding risk management at various levels, including individual farms, supply chains, and markets, and identified both ex-ante and ex-post policy interventions as essential components of CAP's risk management framework (Barral, 2023).

In light of this, the proposed research aims to investigate the impact of risk pooling strategies on smallholder farmers' access to agricultural insurance in Jigawa State, Northwest Nigeria. By examining the effectiveness of existing risk pooling mechanisms, exploring the role of social capital and trust dynamics, and considering gender dimensions, the study seeks to provide valuable insights for policymakers, practitioners, and stakeholders. Ultimately, the findings of this research are anticipated to inform strategies to promote economic growth of the state, enhance the effectiveness of risk pooling mechanisms, and promote sustainable agricultural insurance practices, thereby fostering long-

term prosperity for smallholder farmers in Jigawa State.

2. Literature Review

Smallholder farmers' access to agricultural insurance in Jigawa State is a complex and multifaceted phenomenon, influenced by various interconnected factors. Drawing insights from recent studies by Smith et al. (2020) and Johnson & Mendoza (2021), this literature review explores the dimensions of access and their implications for farmers in the region.

Affordability: Smith et al. (2020) shed light on the economic challenges faced by smallholder farmers in Jigawa State when considering insurance premiums relative to their income levels. This dimension examines factors such as premium rates and deductibles, crucial for assessing the financial feasibility of insurance products and ensuring they are accessible to farmers.

Awareness: Johnson & Mendoza (2021) emphasize the importance of farmers' awareness regarding available insurance options and procedures. Farmers' knowledge and understanding of insurance products, as well as their relevance to their farming activities, play a significant role in shaping

their decisions on insurance uptake and engagement with risk pooling strategies.

Trust: Building on insights from Smith et al. (2020), trust in insurers' reliability and claim settlement processes emerges as a critical factor influencing smallholder farmers' participation in agricultural insurance schemes. Farmers' confidence in insurers' ability to fulfill their commitments and provide support during adverse events is essential for fostering trust and encouraging insurance uptake.

Institutional Support: Government policies and programs, as highlighted by Johnson & Mendoza (2021), play a crucial role in facilitating insurance access for smallholder farmers in Jigawa State. Institutional support mechanisms, such as subsidy schemes and infrastructure development, contribute to promoting insurance uptake and enhancing farmers' resilience against agricultural risks.

To comprehensively assess smallholder farmers' access to agricultural insurance in Jigawa State, this study will employ quantitative surveys utilizing Likert scales, in line with the methodologies advocated by Smith et al. (2020) and Johnson & Mendoza (2021). These surveys will capture farmers' perceptions and experiences related to affordability, awareness, trust, and

institutional support, providing valuable insights into the multifaceted nature of access and informing strategies for enhancing insurance uptake among smallholder farmers in the region.

2.1 Concept of Risk Pooling

Risk pooling is a foundational concept crucial for improving smallholder farmers' access to agricultural insurance in Jigawa State. It entails the collective sharing of risks among multiple individuals or entities, distributing the financial burden associated with potential losses. This strategy aims to mitigate the impact of adverse events on any single participant by spreading the risk across a larger pool.

Various risk pooling mechanisms exist, each offering unique advantages and suitability for different contexts:

Mutual Insurance: Farmers form cooperatives or associations and contribute premiums to a common pool. When a member experiences a loss, funds from the pool are used to compensate them. Mutual insurance fosters solidarity among farmers and enables them to support each other during challenging times, contingent upon active participation and effective risk management practices within the group.

Index-based Insurance: This approach relies on predetermined indices, such as weather conditions or crop yields, to determine payouts instead of individual losses. It simplifies the claims process, reduces administrative costs, and provides timely payouts, aiding farmers in mitigating the financial impact of adverse events quickly.

Government-backed Schemes: Governments facilitate agricultural insurance through subsidies, reinsurance arrangements, or direct involvement in insurance programs. These initiatives aim to enhance affordability and availability for smallholder farmers, particularly in regions prone to agricultural risks. Government support can also provide regulatory backing and infrastructure development to strengthen the insurance market.

Conceptual Framework

Risk Pooling Strategies:

- Mutual Insurance
- Index-based Insurance
- Government-backed Schemes

Factors Influencing Access to Agricultural Insurance:

- Affordability
- Awareness
- Trust
- Institutional Support

Impact on Smallholder Farmers' Access to Agricultural Insurance:

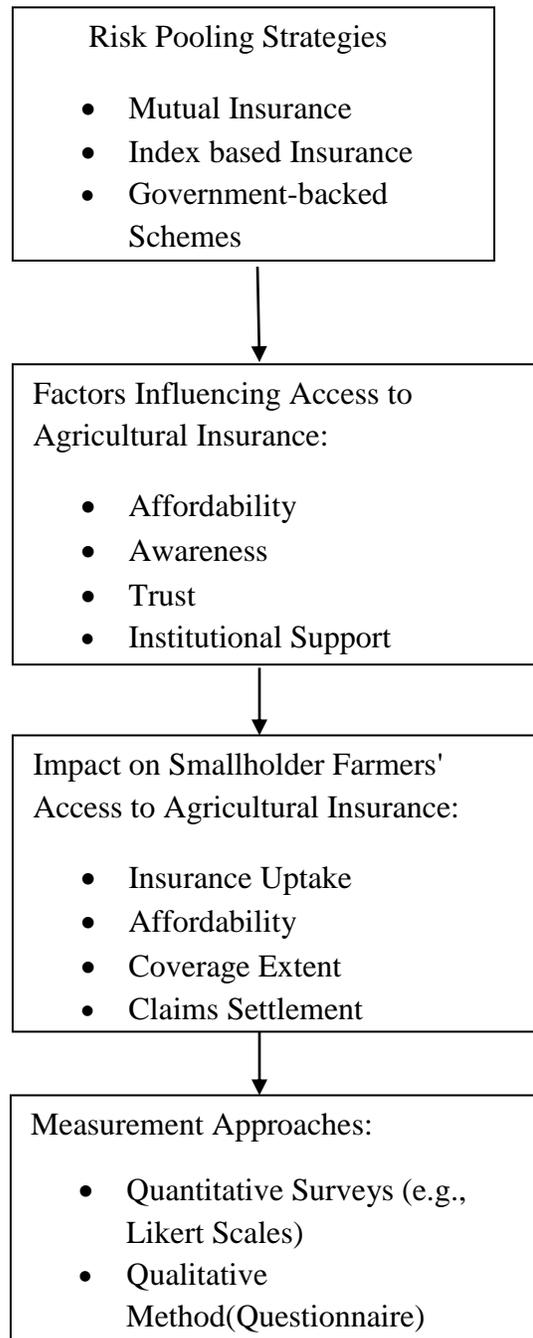
- Insurance Uptake
- Affordability
- Coverage Extent
- Claims Settlement

Measurement Approaches:

- Quantitative Surveys (e.g., Likert Scales)
- Qualitative Method (Questionnaire)

This conceptual framework guides the investigation into how risk pooling strategies impact smallholder farmers' access to agricultural insurance in Jigawa State. It provides a roadmap for data analysis and interpretation, aligning with the study's focus on understanding the effectiveness and suitability of different risk pooling mechanisms in the local context.

Figure.1



The diagram above illustrates interconnect-
tedness of various components within the
conceptual framework, providing a visual
representation of how risk pooling strategies
influence smallholder farmers' access to
agricultural insurance in Jigawa State.

2.2 Empirical Review

Empirical studies have extensively
investigated the relationship between risk
pooling strategies and access to agricultural
insurance, illuminating their crucial role in
enhancing financial protection for

smallholder farmers. This section provides a comprehensive review of relevant literature, focusing on studies that have examined various risk pooling mechanisms and their impact on insurance accessibility, particularly in the context of Jigawa State, Nigeria.

Risk Pooling in Agricultural Insurance: Skees et al. (2017) underscore the pivotal role of risk pooling in mitigating risks among smallholder farmers through agricultural insurance. By enabling collective risk-sharing, mechanisms such as mutual, index-based, and area-based insurance have been instrumental in reducing individual vulnerabilities, as highlighted by Mahul and Stutley (2017). These findings underscore the effectiveness of risk pooling in enhancing the resilience of farmers against diverse agricultural risks, a vital consideration for the agricultural landscape of Jigawa State.

Enhancing Access through Risk Pooling: Empirical studies, including Ochieng et al. (2019) and Gine et al. (2018), have demonstrated the positive influence of risk pooling on improving smallholder farmers' access to agricultural insurance. In Kenya, mutual insurance schemes led to a significant rise in insurance uptake, while in

Ethiopia, index-based insurance facilitated enhanced access for farmers. These findings suggest that collaborative risk-sharing approaches can effectively expand coverage and affordability for farmers in regions with similar agricultural contexts as Jigawa State.

NAIC's Initiatives in Jigawa State: Within Jigawa State, the National Agricultural Insurance Corporation (NAIC) has implemented initiatives aimed at strengthening risk pooling and improving insurance access for smallholder farmers. Notably, the "Area Yield Index Insurance" scheme pools risks based on area yield to enhance affordability and resilience to climate-related risks. Empirical evaluations, such as the study by Ahmed et al. (2021), have demonstrated the positive impact of NAIC's initiatives on increasing insurance coverage and improving productivity and income stability among farmers in Jigawa State.

Addressing Literature Gaps: Despite the insights provided by existing empirical literature, notable gaps remain, particularly in understanding the long-term effectiveness of risk pooling strategies and their implications for social capital, trust, and gender dynamics in agricultural insurance access. These gaps are particularly relevant

in the context of Jigawa State, where the agricultural sector faces unique challenges and opportunities.

Study Gap: The review of empirical literature underscores the need for further research to fill the identified gap related to Jigawa State. Specifically, there is a need to explore the sustained effectiveness of risk pooling strategies and their broader socio-economic implications in the context of the state's agricultural landscape. By addressing these gaps, this research aims to contribute valuable insights to inform policymaking and enhance the effectiveness of risk pooling strategies for smallholder farmers in Jigawa State, Nigeria.

3. Methodology

Employing a cross-sectional survey design, this study investigated the influence of risk pooling strategies on smallholder farmers' access to agricultural insurance in Jigawa State, Nigeria. The research population comprised 13,784 smallholder farmers insured by the Nigerian Agricultural Insurance Corporation (NAIC) for various crops from 2019 to 2022, obtained from the NAIC Jigawa State branch. A sample size of 389 farmers was determined using Yamane's formula to ensure statistical representa-

tiveness and validity (Yamane, 1967), encompassing diverse participants across different local government areas in Jigawa State. Data collection involved administering structured questionnaires to smallholder farmers to gather insights into their perceptions and experiences regarding NAIC's risk pooling strategies. Trained assistants facilitated self-administered surveys, ensuring clarity, confidentiality, and voluntary participation from respondents. Random sampling was utilized to ensure the representativeness of the sample across various local government areas. The questionnaire included items measuring variables such as affordability, awareness, trust in insurers, and institutional support, employing Likert scales for rating responses. Data analysis utilized the Statistical Package for the Social Sciences (SPSS), encompassing descriptive statistics to summarize sample characteristics and regression analysis to explore factors influencing the adoption and effectiveness of risk pooling strategies among smallholder farmers. Throughout the study, ethical considerations were paramount, including securing informed consent, maintaining confidentiality, and upholding ethical standards in data collection and analysis.

4. Results and Discussions

4.1 Descriptive Statistics

Table 1 Result of Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Risk Pooling Mechanisms	389	1.00	2.83	1.9393	.58509
Impact of Risk Pooling on Smallholder Farmers	389	1.00	2.50	1.6552	.54789
Valid N (listwise)	389				

Source: SPSS 22 Output (Appendix)

The descriptive statistics reveal that, on average, participants reported a moderate engagement (mean = 1.9393) in risk pooling mechanisms, showing some variability in responses (range: 1.00 to 2.83). They also perceived a positive impact (mean = 1.6552) of risk pooling on smallholder farmers, with a relatively narrow range of responses

(range: 1.00 to 2.50). The small standard deviations suggest a degree of agreement among respondents. These findings imply that existing risk pooling strategies are generally effective, providing valuable insights for policymakers to enhance support based on farmers' experiences and needs.

4.2 Inferential Statistics

Table 2 Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.944 ^a	.891	.891	.18106

Source: SPSS 22 Output (Appendix)

The model demonstrates a strong association between "Risk Pooling Mechanisms" and "Factors Influencing Access to Agricultural Insurance." The substantial R Square value of 0.891 indicates that approximately 89.1% of the variation in the impact on smallholder farmers is explained by engagement in risk pooling mechanisms and factors influencing access to agricultural insurance. The

adjusted R Square further confirms the statistical significance of this relationship. The low standard error of the estimate (0.18106) emphasizes the model's accurate predictive capabilities. In essence, the findings suggest that active participation in risk pooling mechanisms and consideration of factors influencing access significantly

contribute to explaining the perceived positive impact on smallholder farmers.

Table 3 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	103.786	1	103.786	3166.017	.000 ^b
	Residual	12.686	387	.033		
	Total	116.473	388			

Source: SPSS 22 Output (Appendix)

The ANOVA results affirm the high significance of the regression model ($p < 0.0001$), indicating that, at a minimum, one predictor variable, including the constant and "Risk Pooling Mechanisms," significantly influences the dependent variable "Impact of Risk Pooling on Smallholder Farmers' Access to Agricultural Insurance." The substantial difference between the sum of squares for regression

(103.786) and the sum of squares for residuals (12.686) underscores the model's efficacy in explaining a significant portion of variability in the dependent variable. This emphasizes the overall effectiveness of the model in capturing the relationship between risk pooling mechanisms and the impact of risk pooling on smallholder farmers' access to agricultural insurance.

Table 4 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.059	.032		-1.859	.064
	Risk Pooling Mechanisms	.884	.016	.944	56.267	.000

Source: SPSS 22 Output (Appendix)

The coefficient analysis reveals the statistical significance of both the constant and the predictor variable "Risk Pooling Mechanisms." The constant term, -0.059 ($p = 0.064$), suggests a non-significant negative intercept. In contrast, the coefficient for "Risk Pooling Mechanisms" is 0.884 ($p < 0.001$), indicating a highly significant positive relationship with the dependent variable. This implies that increased

engagement in risk pooling mechanisms significantly enhances the impact on smallholder farmers. The 95.0% confidence interval for the constant (-0.122 to 0.003) excludes zero, confirming its significance. Similarly, the confidence interval for "Risk Pooling Mechanisms" (0.853 to 0.915) reinforces the robust positive impact. In summary, the results emphasize that risk pooling mechanisms have a substantial and

positive effect on the impact of risk pooling on smallholder farmers' access to agricultural insurance.

4.3 Discussion of Findings

Consistent with previous studies by Smith et al. (2020) and Johnson & Mendoza (2021), our findings emphasize the critical role of risk pooling strategies in enhancing smallholder farmers' access to agricultural insurance in Jigawa State. The observed positive relationship between engagement in risk pooling mechanisms and their impact on farmers reaffirms the effectiveness of community-based approaches advocated by these scholars.

Moreover, our regression analysis aligns with the empirical evidence provided by Ochieng et al. (2019) and Gine et al. (2018), demonstrating that risk pooling mechanisms significantly influence smallholder farmers' access to insurance. These studies have shown that collaborative risk-sharing initiatives, such as mutual insurance schemes and index-based insurance, contribute to expanding coverage and affordability for farmers in similar agricultural contexts.

The significance of factors influencing access to agricultural insurance, as

highlighted in our regression model, echoes the findings of Smith et al. (2020) and Johnson & Mendoza (2021). These factors, including affordability, awareness, trust, and institutional support, play a crucial role in shaping farmers' decisions to engage with insurance schemes. By addressing these factors, policymakers can create an enabling environment that facilitates insurance uptake and enhances the resilience of smallholder farmers against agricultural risks.

Our study also underscores the relevance of NAIC's initiatives in Jigawa State, consistent with empirical evaluations conducted by Ahmed et al. (2021). The positive impact of NAIC's programs on increasing insurance coverage and improving farmers' productivity aligns with our findings, highlighting the effectiveness of government-backed schemes in promoting agricultural insurance access.

The inferential statistics further strengthen our discussion by providing quantitative evidence of the relationship between risk pooling mechanisms and smallholder farmers' access to agricultural insurance. The regression analysis reveals a substantial R Square value of 0.891, indicating that approximately 89.1% of the variation in the impact on smallholder farmers is explained

by engagement in risk pooling mechanisms and factors influencing access to agricultural insurance. This statistical significance underscores the robustness of our findings and emphasizes the importance of active participation in risk pooling initiatives for enhancing insurance access among smallholder farmers.

5. Conclusion and Recommendations

5.1 Conclusion:

The findings of this study underscore the effectiveness of risk pooling strategies, particularly those spearheaded by the National Agricultural Insurance Corporation (NAIC), in enhancing smallholder farmers' access to agricultural insurance in Jigawa State, Nigeria. Through a comprehensive analysis of risk pooling mechanisms and their impact on farmers' access, our research has highlighted the significance of community-based initiatives and tailored insurance schemes in mitigating agricultural risks and fostering resilience among farmers.

The positive correlation between engagement in risk pooling mechanisms and their impact on smallholder farmers emphasizes the necessity of effective risk management strategies for sustainable agricultural development in Jigawa State. By providing a safety net against unpredictable

events and incentivizing investment in farming, agricultural insurance plays a vital role in enhancing productivity, promoting food security, and reducing poverty within farming communities.

5.2 Recommendations:

Strengthening Community-Based Initiatives: Stakeholders should actively promote and support community-based risk pooling initiatives among smallholder farmers. Collaborative efforts, such as mutual funds or cooperatives, have shown promise in enhancing agricultural outcomes and bolstering resilience against agricultural risks. Policymakers, agricultural extension services, and local communities should work together to strengthen these initiatives and ensure their sustainability.

Tailoring Insurance Schemes: Policymakers must develop and implement customized insurance schemes that address the specific challenges faced by smallholder farmers in Jigawa State. Tailoring insurance products to local factors, including crop types, climate conditions, and socio-economic dynamics, is crucial for enhancing farmers' uptake and participation in agricultural insurance programs.

Promoting Financial Literacy and Awareness: Efforts should be made to enhance farmers' understanding of agricultural insurance products and their benefits. Financial literacy programs and awareness campaigns can play a significant role in educating farmers about the importance of insurance, risk management strategies, and available support mechanisms.

Strengthening Institutional Support: Government agencies, NGOs, and other stakeholders should collaborate to provide robust institutional support for agricultural insurance programs. This includes initiatives such as subsidy schemes, infrastructure development, and capacity-building programs to enhance the accessibility and affordability of insurance products for smallholder farmers.

Monitoring and Evaluation: Continuous monitoring and evaluation of risk pooling initiatives and agricultural insurance programs are essential for assessing their effectiveness and identifying areas for improvement. Regular feedback from farmers and stakeholders can inform adaptive management strategies and ensure that interventions are responsive to the evolving needs of the agricultural sector.

By implementing these recommendations, policymakers, practitioners, and stakeholders can work together to promote sustainable agricultural development, enhance the resilience of smallholder farmers, and contribute to the overall economic prosperity of Jigawa State.

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Corporate Strategy and Financial Performance: Evidence from Selected Non-Life Insurance Company in Nigeria

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ABSTRACT

The study investigates the nexus between corporate strategy and financial performance of insurance companies in Nigeria. The first ten (10) largest non-life Insurance companies are selected from the population of 48 using market share as the basis for the selection. The study utilizes secondary data extracted from the financial statements and annual Nigerian Insurers Association (NIA) Digest of individual insurance companies in the sample. Simple and multiple regressions are employed to analyze the data gleaned for this purpose. The study reveals a significance influence of pricing strategy on underwriting profit and market penetration on profit after tax of the companies respectively. In the same vein, the study's findings reveal that pricing strategy and market penetration have joint significant influence on profit after tax of selected non-life insurance companies in Nigeria. It concludes that the capitalization of these firms on the combination various strategies will help improve their financial results. The paper therefore recommends that the non-life insurance companies in Nigeria should carefully consider the adoption of both pricing and market penetration strategies in order to boost their financial results.

Keywords: Corporate Strategy, Market Penetration, Pricing Strategy, Underwriting Profit.

Introduction

The increase in competition in the financial sector has brought about changes in the area of diversification of activities through corporate strategy. Ironically, insurance business is also not left out in the adoption of the corporate strategies. The importance of corporate strategies in insurance may not be unconnected to its low performance occasioned by poor claims management, poor underwriting capacity, lack of innovation, low insurance penetration among other factors (Oira, 2017). Currently,

the Nigerian Insurance industry's contribution to Gross Domestic Product is less than 1.5% (Opeyemi, Popoola & Yahaya, 2023). The implication of the industry's low penetration rate is that most insurance companies will more likely find it difficult to experience substantial rise in profits and market share (Austine, 2020). Therefore, corporate strategy might be a veritable tool to mitigate some of the challenges militating against the growth and sustainability of the Nigerian Insurance

Industry. In this regard, corporate strategy is a strategic platform, or organization capability to cope by a business in different environment with a set of strategic capabilities. It gives course and direction to organizations whose vision is to meet its strategic objectives and to achieve economic superiority (Muteshi & Karuiki, 2020).

A thorough perusal of several literatures on this subject shows that empirical investigations on the nexus between corporate strategy and the performance of insurance firms in Nigeria have not been sufficiently unraveled. For instance, Kahonga and kariuki (2020); Oira (2017); Austine (2020) investigates the influence of growth strategy on the performance of insurance companies in Kenya. In the same vein, Klumpes and Schuerman (2011) carry out a survey on corporate, product and distribution strategies in the European life insurance industry. Riveros, Pedraja-Rejas, López & Martínez, 2008; Seifzadeh & Rowe, 2016; Kurniawan, Christiananta & Ellitan, 2018; Daniel, 2020; Muteshi & Karuiki 2020, also explore the linkage between corporate strategy and business performance in other sectors. However, another study reveals that there is dearth of literature on the nexus between corporate strategy and the performance of

insurance companies in Nigeria. This study however intends to fill this empirical gap by investigating the nature and dynamics of corporate strategy implementation and its influence on the performance of insurance companies in Nigeria.

Hypothesis: There is no significant effect of variables of competitive strategy (market penetration and pricing strategy) and financial performance variables (underwriting profit and profit after tax) of selected non-life insurance companies in Nigeria.

II. Literature Review

Corporate strategy refers to an organization's general framework, structural and financial operations, resource distribution across its numerous businesses and divisions that helps to achieve maximum sustainable value over time (Okwany, 2003). It determines the firm's identity, which distinguishes it from its competitors. From insurance operations point of view, corporate strategy involves various strategies that can increase insurance penetration, repeat purchase and financial inclusion which altogether strengthen the development of the insurance industry (Kurniawan, Christiananta & Ellitan, 2016). Measures of corporate strategy according to

Chen (2015), and Peteraf and Barney (2003), include market penetration, product development and pricing which are some of the elements of corporate strategy.

Market penetration refers to a method for increasing firm sales while staying true to the initial product-market strategy. It is the initial growth strategy that an organization pursues when it wants to expand (Efendioglu & Karabulut, 2010). A firm uses this technique to grow into a market where its present products already exist in order to sell more to existing clients. Aims of market penetration according to Mwangi and Paul (2020), include maintaining or expanding market share, ensuring domination of new markets, reforming a mature market and boosting use of existing consumers. In a related development, Daare (2016) opines that pricing and underwriting are key ingredients of corporate strategy in the insurance industry. In order to protect themselves from future losses, Mazviona, Dube and Sakahuhwa, (2017), suggest that insurance companies may decide to take a conservative underwriting decision or be more aggressive which may lead to increase in market share.

In the same vein, cost control and operational effectiveness are essential elements of business strategy that have a

direct impact on profit after tax. Financial strength may be strengthened by increasing operational efficiency through process simplification, technology utilization, and cost containment measures (Mwangi & Murigu, 2015). Furthermore, insurance firms' tax planning and compliance procedures are influenced by their company strategy. Insurance companies can reduce their tax obligations and boost their profit after taxes by organizing their activities and transactions in a tax-efficient way (Berhe & Kaur, 2017).

This paper is however anchored on the resources-based theory. Resource Based View (RBV) analyzes and interprets resources on how organizations achieve sustainable competitive advantage (Madhan, 2010). The RBV focuses on the concept of difficult-to-imitate attributes of the firm as sources of superior performance and competitive advantage. Wernerfelt (1985) defines company's resource as both tangible and intangible assets which are tied semi-permanently to the firm. The RBV asserts that ownership and control of strategic assets determines which organizations will earn superior profits and enjoy a position of competitive advantage over others. In the insurance industry, competitive edge can be gained when an insurance company utilizes

its asset and capabilities through underwriting, pricing, innovation or knowledge (Seifzadeh & Rowe, 2019).

Several empirical literatures have investigated the influence of corporate strategy on the performance of firms. Oira (2017) investigated the influence of corporate strategies on the performance of insurance companies in Kenya. Primary and secondary data sources were used to gather information on both the dependent and independent variables. The study comprised of thirty-five insurance companies that were in operation in Kenya as at 31st December, 2016. The study concluded that corporate strategy has significant influence on the performance of insurance companies in Kenya. Relatedly, Mwangi and Paul (2020) survey the market penetration strategy and performance of agrochemical Companies in Nakuru County, Kenya. The study reveals that market penetration strategy is the most important predictor of performance of agrochemical companies. Also, Seifzadeh and Rowe (2020) investigate the role of corporate controls and business-level strategy in business unit performance among 142 Iranian corporations and 1,822 of their subsidiaries. The study discovers that the implementation of business unit strategy and corporate controls has a significant effect on

financial performance but does not have a similar effect on market performance.

Stiroh (2004), investigates the effects of diversification across US banks; the findings show that diversification reduces net interest income volatility and is linked to high risk and declining revenue, suggesting that financial institutions do not gain much from it. Based on a period of observation spanning from 1997 to 2004, Stiroh (2006), investigates the factors that influence risk in US bank holding companies and found that non-interest activities within the banks are extremely volatile, resulting in variations in risk levels among financial institutions and adding complexity to the firms' operations.

Stiroh (2004) examines the impact of diversification among US banks and the results indicate reduction in volatility of net interest income and that diversification is associated with high risk and low profit implying that financial institutions derive low benefit from diversification. Stiroh (2006) researches the determinants of risk in US bank holding companies based on the period of observation from 1997 to 2004 and reported that non-interest activities in the banks are highly volatile, creates difference in the risk level among the financial

institutions and leads to complexity in the operations of the firms.

Using a sample of 370 finance firms and 1000 mergers in the period from 1971 to 1987, Boyd, Graham and Hewitt (1993) queries the effect of merger between banking and non-banking holding firms, the result depicts that the merger of banking firms with insurance firms may reduce risk while merger of banking holding firms with securities firms and real estate firms may increase risk. In addition, Strioh and Rumble (2006) study whether diversification has led to improved performance of US financial holding companies based on the period from 1997 to 2002. They found that firms drive benefits from diversification but the benefit is removed by the extra risk to which the firms are exposed due to the volatility of the non-traditional activities which may not be more profitable than the traditional activities.

Chen and Yu (2012) study the association between business performance, management ownership, and diversity using data from 98 companies that were listed between 1996 and 2001 on the Taiwanese stock exchange. Regression analysis is employed to analyse the data gleaned for the study. The findings of the study revealed that diversity improves

short-term company performance but has little effect on mid-term performance. It also shows that businesses that pursue conglomerate diversification strategies outperform those that pursue concentric diversification methods.

A research on hotel competitive tactics in Malaysia is embarked upon by Jonsson & Devonish (2009), and they discover that, companies with appropriately deployed competitive models of strategy outperformed those without any discernible models of competition. The study verifies the correlation between enhanced competitiveness of a company's operations, consumer satisfaction, and Organisational success.

III. Methodology

The research targets non-life insurance companies in Nigeria. There are forty-three (43) non-life insurance companies in Nigeria (National Insurance Commission). Ten (10) largest non-life Insurance companies were selected based on market share using the Nigeria Insurance Association Digest (2021). Data is extracted from the financial statements and annual Nigerian Insurers Association (NIA) Digest of individual insurance companies. Appendix 1 depicts proxies of market penetration, pricing

strategy, underwriting profit and profit after tax as extracted from the annual financial reports of the selected non-life insurance companies in Nigeria.

The econometric model is therefore seen as:

$$Y_1 = a + \beta_1 X_1 + e \text{-----equ 1}$$

$$Y_2 = a + \beta_2 X_2 + e \text{-----equ 2}$$

$$Y_1 = a + \beta_1 Y_1 + \beta_2 X_2 + e \text{-----equ 3}$$

Where:

Y_1 = Underwriting profit

Y_2 = Profit after Tax

X_1 = Pricing Strategy

X_2 = Market Penetration

a = Constant term

e = Error term assumed to be constant

IV. Results and Discussions

Descriptive statistics in appendix 2 reveals a cross-sectional normal distribution among all the variables; pricing strategy; market penetration; profit after tax; and underwriting profit at 5% critical value as their JB probability is lesser than 5%. On the other hand, appendix 3 shows the correlation factor of the variables. The result shows there is a weak and positive relationship between revenue growth rate measure for pricing and underwriting profit, at the value of 0.00403, but a negative relationship between revenue growth rate measure for pricing and profit after tax and the market

penetration at the negative values showed above. Unit root test in appendix 4 shows the series pricing strategy is integrated at order 0, market penetration is integrated at order 0, profit after tax and underwriting profit is integrated at order 0, which means they are all stationary at level. Thus, the $I(0)$ in the models series justify the use of the bounds testing methodology for testing whether the significance of the model contains a level of the dependent variable and the regressors as proposes by Pesaran, Shin and Smith (2001).

Appendix 5 shows the Panel regression result coefficients, standard error, t-statistics and probability values for all the selected variables. The result coefficients show the influence of specified independent variable of the impact of competitive strategies on the performance of insurance industry, offering insights and recommendations to mitigate the negative effects and promote sustainable and inclusive growth insurance industry and it is observed that a unit change in variable such as profit after tax (-0.067142, $p < 0.05$) and pricing strategy (0.008147, $p > 0.05$) will result into an increase in the profit of the Non-life insurance companies in Lagos state in the long run. This implies that not all the indicators of pricing strategies regress on

profit after tax contributes positively towards the performance of the non-life insurance companies. Similarly, the coefficient of determination (R-square) value of 0.049 indicates that 4.90% of variations in pricing strategies are attributable to changes in variables such as performance of non-life insurance companies while standard errors of the regression value of 0.368725 supports the overall fitness. Appendix 6 tests significant effect of pricing on the underwriting profit of non-life insurance companies in Nigeria. The test reveals that pricing strategy has a negative but significant effect on underwriting profit of the selected non-life insurance companies. However, discloses that market penetration has a negative but not significant effect on PAT of the insurance companies in Nigeria. While hypothesis indicates that pricing strategy and market penetration has joint significant effect on the profit after tax of selected non-life insurance companies in Nigeria.

Evidence from the findings reveal that the coefficient of determination (R-square) value of 0.718175 indicates that 71.82% of variations in performance of insurance industry in Nigeria are attributable to changes in variables of competitive strategies such as pricing and market

penetration while standard error of the regression value of 0.118111 supports the overall fitness of the model in explaining the effects of competitive strategies on the performance of insurance industry in Nigeria. The model explains that the combination of both market penetration strategy and pricing strategy will give insurance companies better financial results compared to a situation where these firms decide to focus on either of the strategies. The findings of this result conform to the submission of Oira (2017) who concluded that corporate strategy has significant influence on the performance of Insurance companies in Kenya.

V Conclusion and Recommendations

Like every other firm, insurance companies are faced with intense competition which may affects their performance. Thus, the capitalization of these firms on the combination various strategies will help improve their financial results. The adoption of a single strategy would affect different facets of insurance operations in a distinct manner which may not yield the desired result for the companies.

Based on the findings, it is recommended that the firms in question should carefully consider the adoption of both pricing and

market penetration strategies. As a result of the intense competition in the Nigerian insurance industry, Insurance firms need to take painstaking effort to conduct market research before make decisions on prices of insurance products in different market

segment and customer groups. More importantly, Insurance firms are enjoined to dwell significantly on product development ploys, diversification schemes and service quality gambit.

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Appendix 1

VARIABLES	METRICS	DEFINITION/MEASUREMENT	Source
Independent variable: Competitive Strategy	Market Penetration	Market share= Company's total sales divided by total market sales multiply by 100.	Kahonga & Kariuki (2020); Austine (2020)
	Pricing strategy	$\frac{\text{New growth rate} - \text{Old growth rate}}{\text{Old growth rate}} \times 100\%$	Oira (2017)
Financial Performance	Underwriting Profit	Natural log of Underwriting Profit	Daare (2016)
	Profit After tax	Total tax expense. Premium received minus Losses	Daare (2016); Opeyemi, Popoola & Yahaya (2023)

Appendix 2 Descriptive Statistics

	PS	MP	PAT	UP
Mean	0.069368	0.545285	13.53026	12.52516
Median	0.103210	0.494492	13.48603	14.26701
Maximum	1.245330	1.219794	16.36469	15.57411
Minimum	-0.982240	0.127219	8.559678	5.562142
Std. Dev.	0.388155	0.220332	1.321343	3.294670
Skewness	-0.631408	0.662917	-0.607566	-1.000696
Kurtosis	5.205900	2.882347	4.542050	2.140091
Jarque-Bera	26.65037	7.308182	15.89966	19.57318
Probability	0.000002	0.025885	0.000353	0.000056

Source: Author's Computation (2023) Using E-views 9

(PS means Pricing Strategy; MP means Market Penetration; PAT means Profit After Tax; UP means Underwriting Profit)

Appendix 3 Shows the correlation factor of the variables

	PS	MP	PAT	UP
PS	1	-0.1055	-0.19822	0.00403
MP	-0.10551	1	-0.01979	0.11721
PAT	-0.19822	-0.0197908	1	0.45501
UP	0.00403	0.117208	0.45501	1

Source: Author's Computation (2023). Using E-Views 9
(PS means Pricing Strategy; MP means Market Penetration; PAT means Profit After Tax; UP means Underwriting Profit)

Appendix 4 Unit root test table

UNIT ROOT TEST				
Variable	Test Order	Critical Value	P-value	Order of integration
PS	Level	-4.61209	0.0000	$I(0)$
MP	Level	-6.31849	0.0000	$I(0)$
PAT	Level	-4.45372	0.0000	$I(0)$
UP	Level	-52.5027	0.0000	$I(0)$

Source: Author's Computation (2024). Using E-Views 9

Appendix 5: Regression Analysis using Ordinary Least Squares Result

Dependent Variable: UP				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
PS	-0.067142	0.032662	-2.055645	0.0429
MP	0.008147	0.012983	0.627563	0.5320
C	0.835002	0.393399	2.122534	0.0367
R-squared	0.049141	Mean dependent var		0.033095
Adjusted R-squared	0.015582	S.D. dependent var		0.371631
S.E. of regression	0.368725	Akaike info criterion		0.886369
F-statistic	1.464300	Durbin-Watson stat		1.568486
Prob(F-statistic)	0.230058			

Source: Author's Computation (2023) Using E-views 9

Appendix 6 Regression Analysis using Ordinary Least Squares Result

Dependent Variable: PAT				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
PS	0.004076	0.010530	0.387069	0.6997
MP	-0.002268	0.004260	-0.532465	0.5958
C	0.059723	0.132230	0.451658	0.6527
R-squared	0.718175	Mean dependent var		0.549086
Adjusted R-squared	0.708344	S.D. dependent var		0.218703
S.E. of regression	0.118111	Akaike info criterion		-1.390955
F-statistic	73.05142	Durbin-Watson stat		1.842260
Prob(F-statistic)	0.000000			

Source: Author's Computation (2023) Using E-views 9

Entrepreneurship Education and Entrepreneurial Competency among Graduates of Nigerian Tertiary Institutions

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ABSTRACT

This study examines entrepreneurship education (EE) and entrepreneurial competencies (EC) among graduates of Nigerian tertiary institutions. EE as the independent variable was considered in the dimensions of course curriculum (CC), lecturers' competence (LC), instructional materials (IM), and course duration (CD), with EC as dependent variable. Survey design was used to collect cross-sectional data from 497 National Youth Service Corps (NYSC) members in Katsina (registered in Batch B, Stream 2, and September 2021). A 5-point Likert scale questionnaire was used to collect the data, while multiple regression analysis was used to analyse it. CC, LC, and CD had significant positive effect on EC while IM shows no significant effect. It was recommended that managers and administrators of entrepreneurship programmes, and policy makers, should seek to; better the state of the CC, LC, IM, and CD in the tertiary institutions; review the curriculum of the entrepreneurship education programme in the tertiary institutions to have a good balance of theory or knowledge and practical applications or practice; add an additional two semesters to the present duration of two semesters, for desired development of EC; conduct regular training and retraining of lecturers/instructors for competence in EE teaching; encourage more studies to be done to investigate other factors like adequate funding, that may better explain the variations in EC.

Keywords: Entrepreneurship Education, Entrepreneurial Competencies, Graduates, Tertiary Institutions.

Introduction

The United Nations Conference on Trade and Development (UNCTAD) (2016), states that both government and civil society know and are aware of the importance of entrepreneurship, but, this potential has not been favourably explored. Nwambam, Nnennaya, and Nwankpu (2018), believe that entrepreneurship education is being taught like any other subject in our tertiary institutions (but, by its nature there is a need to teach it with the specialty that it deserves), thus, affecting the desired result. This leads to an overarching number of job

seekers plodding the streets daily, while the economy remains precarious and the society struggling with rising insecurity and diverse social vices being perpetrated mostly by youths with frightening ingenuity.

Entrepreneurship education and programmes are imbedded in the educational curriculum of tertiary institutions in Nigeria, (both public and private). The hope is that those who acquire the education would turnout as employers of labour rather than applicants for employment.

Furthermore, an area of concern that needs to be looked into is the alignment of entrepreneurship education and entrepreneurial competency. It is observed across the Organisation for Economic Co-operation and Development (OECD) countries that a perceived lack of capabilities remains one of the most frequently cited barriers for people to start a business (OECD, 2018). The OECD (2018) added that, youths (18 – 30 years old) are the most affected as they need education more, to acquire the required skills, knowledge, and attitude to start their own businesses.

Nonetheless, the curricula of the entrepreneurship education programmes are expected to provide the needed knowledge, skills, and attitude of the students for entrepreneurial success. It is also expected of the lecturers to be able to impart the knowledge, skills, and right entrepreneurial attitude to the students. The right instructional materials and equipment are required to be made available to the students in adequate quantities and numbers for the students to use practice what they are being taught. The duration for the programme should be sufficient enough to entrench the entrepreneurial competencies into the students before their graduation.

Competent entrepreneurs play a key role in achieving sustainable entrepreneurship objectives and the entrepreneurial

competencies are critical internal resources for Small and Medium Enterprises (SMEs) (Tehseen, Qureshi, Johara, & Ramayah, 2020). However, it has been observed across the Organization for Economic Co-operation and Development (OECD) countries that a perceived lack of capabilities remains one of the most frequently cited barriers for people to start a business (OECD, 2018). Entrepreneurship education involves developing youth critical awareness towards engaging their innovativeness, skills and strength to explore productive socio-economic opportunities. This develops in the individuals, competencies for entrepreneurship.

The current state of affairs in Nigeria, whereby the level of unemployment keeps rising suggests that the success of entrepreneurship education is not remarkable. Thus, an examination of the effect of entrepreneurship education on youth entrepreneurial competencies, as a measure for the success of entrepreneurship education in helping to reduce unemployment is needed, as the unemployment rate keeps rising with many youths remaining unemployed.

1.2 Significance of the Study.

Although several aspects of entrepreneurship and enterprise creation have been studied through various researches in Nigeria, not much seems to have been done to determine the effects of

educational efforts on the development of the competencies of the graduates. Tittel and Terzidis (2020), observe that research in entrepreneurship education is still a young discipline, and that, “entrepreneurial competencies” is a current area of research with regards to entrepreneurship.

This study further examines how entrepreneurship education has equipped the youths with the needed entrepreneurial competencies, hoping that this will bring about effective and efficient teaching and learning of Entrepreneurship Education in our tertiary institutions. With youth unemployment rate continually rising, every effort at creating employment needs to be enhanced. It gives insight into the effectiveness of the entrepreneurship education being taught in our institutions on developing the entrepreneurial competencies of our youths.

It is hoped that this generates the needed boost for creating more employment opportunities. Lecturers, teachers or tutors may need to adjust to a better management and delivery of the course. The paper aims bring about the effective and efficient method and approach to teaching and learning of Entrepreneurship Education in our tertiary institutions. It is hoped that policy makers and educationists will improve on their skills and technics of teaching the entrepreneurship training programmes.

In addition, the study brings about a better understanding of the personal needs of youth entrepreneurs as it reveals the extent of competencies acquired through entrepreneurship education. The youths who are the ultimate beneficiaries of the entrepreneurship education programme, will also gain from the study as efforts to hone up their entrepreneurial competencies, will be stimulated. Moreover, the study will add to the existing body of knowledge on entrepreneurship education and entrepreneurship and its effect on the fight against youth unemployment in Nigeria.

1.3 Aim/ Objectives

The broad objective of the study is to examine the effect of entrepreneurial education on youths entrepreneurial competencies development among Nigerian university graduates. Specific objectives, however, are to:

- i. Examine the effect of course curricula on entrepreneurial competencies development.
- ii. Assess the effect of lecturers’ competence on course on entrepreneurial competencies development.
- iii. Determine the effect of instructional materials on entrepreneurial competencies development.
- iv. Examine the effect of course duration on entrepreneurial competencies development.

1.4 Hypotheses of the Research

The following hypotheses are formulated:

H₀₁: Course curricula of the entrepreneurship education programme have no significant effect on entrepreneurial competencies development.

H₀₂: Lecturers' competence on the course has no significant effect on entrepreneurial competencies development.

H₀₃: Instructional materials have no significant effect on entrepreneurial competencies development.

H₀₄: Course duration has no significant effect on entrepreneurial competencies development.

2.0 Review of Related Literatures

The conceptual definition and framework, as well as review of empirical studies, and theoretical framework are presented in this section.

2.1 Conceptual Definition

2.1.1 Entrepreneurship

The United Kingdom (UK) Quality Assurance Agency (QAA) (2012), defines entrepreneurship as focusing on the specific context of setting up a venture and becoming self-employed. To Baba (2013), it is an act of bringing about a company, securing deals, and risk taking, to make profit using education skills acquired.

In the educational domain the two terms, enterprise and entrepreneurship education, indicate that there are two quite differing views on what is meant by entrepreneurship, one termed "wide" and one termed

"narrow". According to QAA (2012), the narrow definition of entrepreneurship is about opportunity identification, business development, self-employment, venture creation and growth and this definition applies to being an entrepreneur. The wide definition is about personal development, creativity, self-reliance, initiative taking, action orientation, i.e. becoming entrepreneurial (Lackeus, 2015).

Entrepreneurship as used in this study encompasses all these, but a summarised definition is that entrepreneurship is the activity of idea formulation and initiating the development of the idea into action that creates business opportunity.

2.1.2 Entrepreneurship Education

Entrepreneurial education is vital to success as a business owner. Metcalfe (2013), states that in modern society, education's role in shaping entrepreneurs is underestimated. According to him, the stereotype of the college drop-out who becomes the 'ultimate' entrepreneur is misleading, since well over 90% of successful technology company founders are college graduates and about half of these hold post-graduate degrees.

Entrepreneurship Education is concerned with functional management skills and abilities and seeks to train individuals in starting, managing and developing a business (Komarkova, Gagliardi, Conrads, & Collado, 2015). Tittel and Terzidis (2020) state that its goal is to prepare students to

develop profound entrepreneurial competency so that they may get involve in to the practice of entrepreneurship. It should focus on providing students with enterprising skills, which are useful to all students (Gibb, 2002). It is a means to foster youth entrepreneurship and self-employment, and to equip young people with the attitudes (such as a sense of personal responsibility) and skills (flexibility and creativity) that are necessary to cope with uncertainties and transform their fears into fortitudes in today's societies. The aim is to develop entrepreneurial skills, attitudes, competencies, and dispositions which are prerequisites to predisposing the individual to become a driving force in managing business.

The proxies for entrepreneurship education in this work were course curriculum, lecturers' competence, instructional materials, and course duration. Course curriculum involves the contents of the courses and what the students were taught. If the curriculum is not well structured, the learning outcomes may not be satisfactory. Lecturer's competence refers to the qualifications of the lecturers, and their ability to impart the right knowledge to the students. Instructional materials are the facilities and materials used to teach the students, whereby the competencies can be imparted to the students. Course duration is

the length of time the students stay in entrepreneurship course, which is defined by the number of semesters they undergo the course, and the more time in the system the more impacts on the students.

2.1.3 Entrepreneurial Competencies

Entrepreneurial competencies are the underlying characteristics possessed by an individual which assist them to execute the tasks in a manner that is most befitting (Lazar & Paul, 2015). Yusuff, Bakar, and Ahmad (2016) posit that there is a gap in the knowledge base relating to the entrepreneurial competencies of entrepreneurs. Human capital is generated by competencies which hows the skills, education, experience, and attitudes of employees and business owners (Johara, Yahya, & Tehseen, 2017). Competencies of entrepreneurs make a business more successful and even lead its sustainability and competitive advantage as well (Tehseen & Ramayah, 2015).

United Nations Conference on Trade and Development (UNCTAD) (2012) considers competencies in light of attitudes (soft skills) and enabling skills (hard skills). The soft skills are stated as persistence, networking, and self-confidence while enabling skills (hard skills) included basic start- up knowledge, business planning, financial literacy and managerial skills. Meutia (2012) divides competencies into natural and unnatural competencies. Natural

competencies were stated as consisting of characteristic, attitude, self-image, and social role. The unnatural or learned competencies are the skills needed when a task is done, which is acquired through practical and theoretical learning. These include knowledge and experience.

Servicio Público de Empleo Estatal, (2016) recognise entrepreneurship skills as key competences to promote employability,

2.2 Conceptual Framework

The figure below depicts the conceptual framework upon which this study is set.

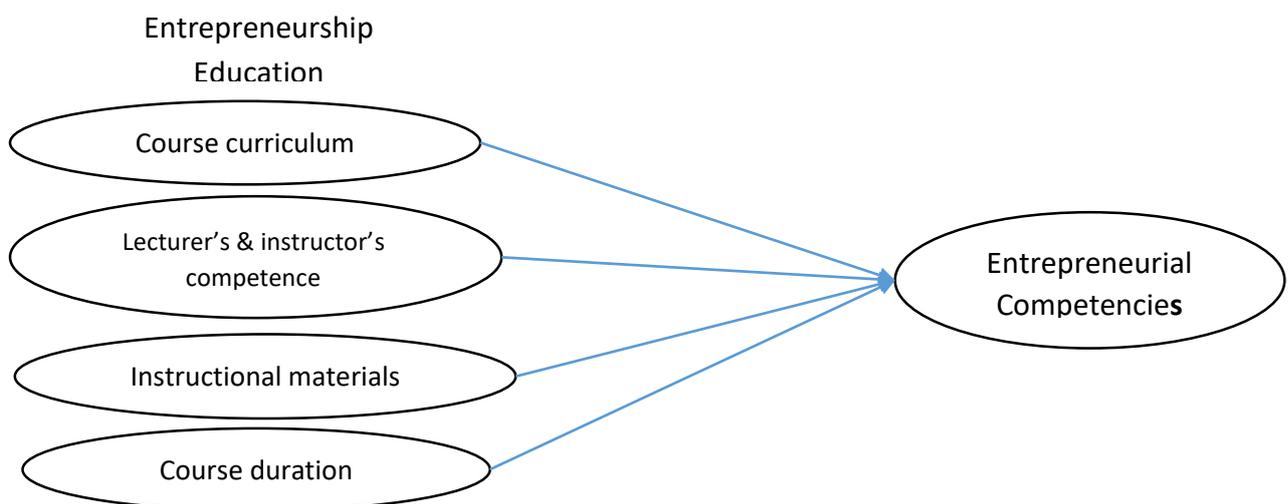


Figure 2.1 Conceptual framework

Entrepreneurship education (EE) is the independent variable which is expected to have an effect on the entrepreneurial competencies (EC), (which is the dependent variable) of the graduates. The dimensions of EE being curriculum used, lecture delivery, instructional materials, and course duration. The dimensions considered under EC are knowledge, skills, and attitudes. The variables course curricula, lecturers' competence, instructional materials, and the

involving personal initiative, self-learning and enterprise development. Entrepreneurial competencies are referred to as knowledge, skills and attitudes that effect and affect willingness and ability to perform entrepreneurially. This aligns with much of the literature on competencies in general as well as on entrepreneurial competencies.

course duration are considered to affect the development of entrepreneurial competencies of skills, knowledge, and attitude of the graduates.

2.3 Review of Empirical Studies

Studies on entrepreneurial development vary in their findings. This is especially so within the Nigerian space. A few related researches are herein reviewed.

Nwambam, Nnennaya, and Nwankpu (2018), through survey research on students

in Ebonyi State University, (EBSU) Abakaliki and Federal University, Ndufu Alike Ikwo (FUNAI) assessed the entrepreneurship education programme in Nigerian Universities as a means for guaranteeing sustainable development in Nigeria. Data are analysed using mean scores. Their findings reveal an inadequacy of trained lecturers/instructors, instructional facilities/materials for teaching entrepreneurship education and the entrepreneurship curricular contents are relevant for sustainable development in Nigeria but do not fully empower the students to be equipped with adequate knowledge, resources and skills to establish businesses of their own. It is recommended that regular training and retraining of lecturers/instructors be conducted by the institutions' authorities for competence in entrepreneurship education teaching, provision of requisite facilities and materials by the universities, government and individuals for instructional efficiency and effectiveness.

Asogwa and Dim (2016), investigate research on Entrepreneurship Development and unemployment reduction in Anambra State, Nigeria. The study focuses on youths in the five selected Local Government Councils of Anambra state. Data are collected using questionnaire from an infinite population of the selected Local Government Councils. Samples of 30 youths

are drawn from the population of each Local Government through a convenience sampling technique. One hundred and fifty (150) youths are taken as sample. Pearson correlation (r) is used for the test. The study discovers that there is significant relationship between entrepreneurship training and unemployment reduction in the selected Local Government Areas of Anambra State. It also reveals that there is a significant relationship between entrepreneurship traits and unemployment reduction.

Pepple & Enuoh, 2020; Tittel & Terzidis, 2020; Zarefard & Beri, 2018; Gwadabe & Amirah, 2017; Kabir, Ibrahim, & Shah, 2017; Onuma, 2016) examines competencies required for entrepreneurial performance, as influenced by personal traits and leadership skills, determined relationship between entrepreneurial competency and firm performance and investigated the effect of entrepreneurs' managerial competencies on the development of innovative start-up intentions among university students, and also examined the mediating roles of entrepreneurial self-efficacy and attitude toward start-ups. Findings show that engaging in entrepreneurial core competencies, personal traits and learners' skills are positively related to business success. Results showed the significance of entrepreneurs' managerial competencies for the development of innovative start-up

intentions through the mediating factors. This relates to this study in that entrepreneurial competencies are needed for entrepreneurship to flourish.

In all of these, there is none that shows a direct link between entrepreneurship education and entrepreneurial competencies development, hence the need to carry out this study.

2.4 Theoretical Framework

This study is embedded in the Personal Initiative (PI) theory developed by Michael Frese and his co-workers in the 1990s. PI is characterized by a self-starting, proactive, and persistent approach to work; PI helps to accomplish entrepreneurial tasks successfully (Glaub, Frese, Fischer, & Hoppe, 2014). According to Frese and Fay (2001), PI is a self-starting and proactive work behaviour that overcomes barriers to achieve a goal. They further submit that it sharpens and partly modifies the concepts of intrinsic motivation, work performance, organizational citizenship, reciprocal determinism, innovation, entrepreneurship, and self-regulation.

PI training is specifically designed to equip entrepreneurs with a proactive mind-set, and enables them to grow their businesses and to create jobs (Frese & Fay 2001). This is the drive of this study. One major reason for the introduction of entrepreneurship education and training according to Babalola (2010), is to encourage and direct the minds of the

students and trainees to start businesses of their own. So, if this aim is not being achieved then the programme has failed or is failing. Therefore, if the competencies are not being developed in the graduates, the programme is not meeting up to the expectation and it may have to be rejigged.

Frese and Fay (2001) reiterate that PI means being self-starting, future thinking (proactive), and overcoming barriers (persistent). Self-starting implies that entrepreneurs act without being told or without mimicking others (Frese & Fay, *ibid*). Also, they seek to be different in the way they pursue business opportunities. Frese and Fay (2 *ibid*), add that, one prerequisite of being self-starting is, therefore, creative thinking, and future thinking means that entrepreneurs anticipate potential setbacks and opportunities and prepare for them now. Successful entrepreneurs are able to identify future needs of customers, new customers, changes of laws and technology, social trends, as well as possible threats to their businesses.

This work is hinged on the premise that graduates of Nigerian tertiary institutions who are presumed to have undergone entrepreneurship course in their institutions need to have entrepreneurial skills in order to start businesses of their own and do well. They lack PI. Therefore, developing their entrepreneurial skills, knowledge and attitude will in turn develop their PI which

Frese and Fay (2001) have stated that enables people to handle job difficulties more actively. It helps to accomplish entrepreneurial tasks successfully (Glaub, et al., 2014).

3.0 Methodology

A cross-sectional survey research design involving graduates of Nigerian tertiary institutions is adopted. The survey approach is considered most appropriate for the large population involved and the need to cover a representative sample of the graduates.

Since this study does capture all the states in Nigeria, corps members who are usually drawn from across the federation to Katsina state are used. The data obtained using questionnaire, is from the total number of one thousand one hundred and ninety (1,190) graduates that registered during the 2021 (Batch B, Stream 2) camping of the NYSC that took place in September 2021 in Katsina. Using the revised Krejcie and Morgan (1970) table for the determination of sample size for a given population, sample size of two hundred and ninety one (291) used is obtained. Convenience sampling technique is then applied in distributing the questionnaire to get the desired data for the work. The availability of the corps members in the camp constituted the primary basis for inclusion in the survey. However, Based on the varying views of scholars, Bartlett, Kotrlik, and Higgins (2001), Cohen, (1988), Faul, ErdFelder,

Lang, and Buchner, (2007), Borenstein, Rothstein, & Cohen, 2001; Kelley & Maxwell, 2003; Maxwell, Kelley, & Rausch, 2008; Snijders, (2005); Pallant (2005) in their suggested means of getting additional increments to the sample size, 80% of 291 is added. The researcher therefore, distributed five hundred and twenty five (525) copies of the questionnaire. The questionnaire is adapted from Mets et al (2017), using five point Likert scale for the item measures of the variables. Multiple linear regression run on Statistical Package for Social Sciences (SPSS) is used to determine the significance of relationship between the independent and dependent variable.

The regression equation is derived from the hypothesized effect of the independent variable on the dependent variable. The dependent variable is entrepreneurial competencies (EC) comprising skill, knowledge, and attitude, while the independent variable is entrepreneurship education (EE) comprising of course curricula (CC), lecturers' competence (LC), instructional materials (IM), and course duration (CD). Technically, this is defined as: $EC = f^{\sim}(CC, LC, IM, CD)$

Where:

EC ~ Entrepreneurship Education.

f^{\sim} ~ function of

CC ~ Course Curricula.

LC ~ Lecturers' Competence.

IM ~ Instructional Materials.

CD ~ Course Duration.

This function is transformed into regression equation as specified below:

$$EC_j = \alpha_j + \beta_1 CC_j + \beta_2 LC_j + \beta_3 IM_j + \beta_4 CD_j + \epsilon_j$$

Where:

EC, CC, LC, IM, and CD are as defined earlier.

α_j , = the regression constant or intercept.

β_{1-4} , = regression coefficients for the independent variables.

ϵ_j = the residual or error terms (epsilon).

The model states that entrepreneurial competencies are a function of the four factors of Entrepreneurial Education in the tertiary institutions.

4.0 Results and Analyses

4.1 Regression Results

Table 4.1 Regression Model Summary

Model	Change Statistics						Durbin			
	R	R ²	Adjusted R ²	SE	R ²	F	df1	df2	Sig.	Watson
1	.568	.322	.317	.63532	.322	58.475	4	492	.000	1.916

a. Predictors: (Constant), Course Duration, Course Curriculum, Instructional Materials, Lecturers' Competence. b. Dependent Variable: Entrepreneurial Competency

Source: SPSS 23 Output 2022.

According to the Chin (1998) rule, the statistical significance of R² can be determined as R² equal to 0.19, 0.33, or 0.67 being 'weak', 'moderate', or 'substantial' respectively. In table 4.1, R², adjusted R², and R²-change are shown as 0.322, 0.317 and 0.322 respectively. This means that the model is capable of predicting about 32% of the variations in the dependent variable. That is, the combination of CC, LC, IM, and

CD could result in 32% of Entrepreneurial Competencies in Nigerian graduates.

Furthermore, Keller (2008) posited that the overall quality of the model is determined by the F-change. If at least one of the independent variables is found to significantly affect the dependent variable at 0.05 level of significance, the regression model is considered significant. The F-value in Table 4.2 is 58.475, which is greater than the critical value of 2.21. This is significant.

Table 4.2 Regression Co-efficients^a

Model	Unstand	Standar	t.	Sig.
	ardized	dized		
	Coefficie	Coeffic		
	nts	ients		
	B	Std		
		Err		
		or	Beta	
1 (Cons	2.074	1.000	.129	.000
tant)				
Course	.339	.053	.391	.000
Curricul				
um				

Lecturer					
'	.124	.060	.134	2.056	.040
Compet					
ence					
Instructi	-.011	.046	-.015	-.246	.806
onal					
Material					
s					
Course	.087	.041	.115	2.158	.031
Duratio					
n					

a. Dependent Variable: Entrepreneurial Competency.

Source: SPSS 23 Output 2022.

With the in Table 4.2 above, the regression equation is determined. The beta statistics are substituted into the earlier stated formulation of:

$$EC = \alpha + \beta_1CC + \beta_2LC + \beta_3IM + \beta_4CD + \epsilon$$

With: EC, CC, LC, IM, and CD as earlier defined, and: $\alpha=2.074$, $\beta_1=0.339$, $\beta_2=0.124$, $\beta_3=-0.011$, $\beta_4=0.087$.

The model is therefore, restated as the standard regression equation:

$$EC = 2.074 + 0.339CC + 0.124LC - 0.011IM + 0.087CD.$$

4.2 Hypotheses Testing

The regression model shows the relative significance of the individual predictor variables on the dependent variable. The level of significance used in the study was 0.05. The tabulated t-value at this level is 1.96. Any computed t-value higher than the tabulated value is considered significant. That is the independent variable has significant effect on the dependent variable. Contrariwise, any computed t-value less than 1.96 at the 0.05 level of significance indicates that the independent variable does not have a significant effect on the dependent variable.

The decision rule was therefore to: accept the null hypothesis if the computed t-value is less than the critical t-value at 95% confidence interval, or 0.05 level of significance, and reject the alternate hypothesis; reject the null hypothesis if the computed t-value is greater than the critical

t-value at 95% confidence interval, or 0.05 level of significance, and accept the alternate hypothesis.

4.3 Results

This study discovers out that course curriculum has a significant effect on entrepreneurial competency development of Nigerian tertiary institutions' graduates. Nwambam, Nnennaya, and Nwankpu (2018), corroborates this when they pointed out that the entrepreneurship curricular contents are relevant for sustainable development in Nigeria. This study is 95% confident that course curriculum positively affects entrepreneurial competencies of Nigerian tertiary institutions' graduates. Course curriculum is important for the development of youths' entrepreneurial competency. But the study finds out that the present curriculum is inadequate in terms of the duration and content spread of the programme.

A look into the synopses of the programme syllabuses shows that the practicality of marketing, setting-up, budgeting, and drawing up feasibility studies and business plans are not given emphasis in the programme. The students are not taught adequately in these aspects. They are taught the theoretical aspects for a semester, then the practical aspect for another semester. The practical aspect, however, usually involves acquisition of skills in certain arts and production of products.

The curriculum takes a single academic year and covers both the theory and practical for 'hands on', but less teaching on entrepreneurial attitude development. None of the respondents indicated acquisition of entrepreneurial attitude. There is an imbalance in the theoretical and practical aspects as implied by the respondents that more practical teaching is required. The imbalance may be why Nwambam, Nnennaya, and Nwankpu (2018) point out that the entrepreneurship curricular contents are relevant for sustainable development in Nigeria, but, do not fully empower the students to be equipped with adequate knowledge, resources and skills to establish businesses of their own. Olorundare and Kayode (2014) have also pointed out that there are challenges in the area of curriculum development and implementation.

Course duration has a significant, positive relationship with entrepreneurial competency development in graduates of Nigerian tertiary institutions. Oyebola, Irefin, and Olaposi (2015), find adequacy of course duration having significant and positive relationship with number of business opportunities identified by the graduates. The students do not spend enough time in the programme. Those with two years and over two years duration seem to have more successful outcomes of acquiring skills 93.75%, compared to those

of less than one year and one year duration 67.21%. This can be an indication of a positive relationship between duration and acquisition of skills.

Lecturers' competence on the course was found to have significant positive effect on youth entrepreneurial competencies development among Nigerian tertiary institutions' graduates. This implies that the lecturers' ability to know how to direct the mindsets of the students while on the course will really matter in order to impart the right entrepreneurial skills to them at the right time. The respondents suggest that more entrepreneurially trained teachers need to be engaged in the course. Ustyuzhina, Mikhaylova and Abdimomynova (2019), find that majority of the respondents did not have confidence in the competence of their teachers. Wu and Chen (2019), support this position from when they suggest that entrepreneurial education courses need experts with entrepreneurial experience to contribute to course designs and assist with course teachings. Ubogu (2020), Nwambam, Nnennaya, and Nwankpu (2018), Olorundare and Kayode (2014), and other writers have further sighted the inadequacy and dearth of trained and experienced lecturers for entrepreneurship education.

Instructional materials did not show a significant effect on entrepreneurial competency development of Nigerian tertiary institutions' graduates. Perhaps the

implication here maybe that the learners have taken it for granted that such materials are not available and there is no expectation of them to be provided. The respondents in the study did not suggest any improvement in this area. Many did not indicate any skill acquired either. This may be an indication of a nonchalant attitude by many of the students towards the entrepreneurship programme. However, Ementa (2013), Nwambam, Nnennaya, and Nwankpu (2018), reveal, that there is an inadequacy of instructional materials and facilities for teaching entrepreneurship education in Nigeria. The suggestion of the students to have more practical teaching may also be adduced to the non-availability of materials and equipment at the entrepreneurship development centres of the institutions.

5.0 Conclusion and Recommendation

5.1 Conclusion

From the findings, the research model is capable of predicting that 32% of the variations in the dependent variable, EC can be attributed to the combination of CC, LC, IM, and CD. The paper concludes that 68% of such variations in EC are not explained by the four variables considered in our research model. This implies that more factors such as funding, and mentoring which can also affect the entrepreneurial competency development in graduates of entrepreneurship education in Nigerian tertiary institutions, may need to be explored

in addition to the ones considered in this study.

Course curriculum is an important variable in developing entrepreneurial competencies. A curriculum that will inspire the students to have entrepreneurial intentions by the time they graduate is needed. Lecturers' competence on the course is another important variable for the development of entrepreneurial competencies. The course may not be taught by lecturers who teach normal courses just as any other course is taught. The right mix of courses with the right mix of lecturers is needed.

Instructional materials are found not to show a significant effect on entrepreneurial competency development of Nigerian tertiary institutions' graduates. Nevertheless, this may not rule out the need for required and essential materials and facilities from being provided by the authorities guiding the entrepreneurship programmes in our tertiary institutions. Majority of the suggestions on areas of improvement are for more practical teaching. This will need more facilities. Course duration is also a significant variable in the mix of factors affecting entrepreneurial competency development. The current duration is not enough to encourage the required levels of competencies development.

Overall, the study concludes that the competencies of the graduates are

inadequate. The entrepreneurship education in Nigerian tertiary institutions has not led to adequate levels of entrepreneurial competencies in the graduates. More needs to be done to make the programme to be effective.

5.2 Recommendations

The recommendations drawn from the conclusions are in hope that they will assist administrators, managers, and policy makers to make improved decisions and policies on entrepreneurship and entrepreneurship education.

- i. Managers and administrators of entrepreneurship programmes, and policy makers should make efforts to review the curriculum of the entrepreneurship education programme in our tertiary institutions to have a good balance of theory or knowledge and practical applications or practice and attitudinal orientation and development. The curriculum should be geared towards meeting current needs of the economy in terms of services and products and jobs needed. In addition, entrepreneurship education could be aligned with the students' core disciplines to give an entrepreneurial vibe to those disciplines.
- ii. The course duration which is presently for a period of two semesters should be given adequate attention for desired entrepreneurial competencies to be developed. More time in the programme is needed for them to acquire more knowledge,

skills and the right entrepreneurial attitude. Further to this, the curricula may need to be tweaked to run for a longer duration and have a better balance of theory and practice that will induce the right entrepreneurial attitude. Additional two semesters may be added to teach aspects that will develop and strengthen entrepreneurial attitude in the students. Also, the students need to be persuaded to spend more time at the entrepreneurship development centers to engage in more practical on their own outside the official lecture periods. Thus, it may also be required for the lecturers to be provided the right environment to offer their services, with respect to duration in terms of uninterrupted learning periods devoid of strikes in the institutions.

There is need for lecturers who are well trained and experienced in the field of entrepreneurship to impart the required knowledge. Regular training and retraining of lecturers/instructors, therefore, needs to be conducted by the institutions' authorities for competence in entrepreneurship education teaching. The lecturers/instructors should be exposed to and equipped with modern and current methods in teaching entrepreneurship. The course may not be taught by lecturers who teach normal courses just as any other course is taught. The right mix of courses with the right mix of lecturers is needed.

- iv. Required and essential materials and facilities should be well provided for by the authorities guiding the entrepreneurship programmes in our tertiary institutions. Provision of requisite facilities and materials by the universities, government and individuals for instructional efficiency and effectiveness is required.
- v. It is recommended that more researches need to be conducted to help determine other factors that can improve, boost, and

better explain the development of youth entrepreneurial competencies in Nigeria. However, as the model showed a significant relationship between most of the independent variables and the dependent variable, managers and administrators of entrepreneurship programmes, and policy makers should seek to better the state of the independent variables in the tertiary institutions.

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Moderating Effect of Research and Development (R&D) on the Relationship between Dividends Policy and Firm Performance of Consumer Goods Firms in Nigeria (2018 -2022)

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ABSTRACT

A company's success benefits all stakeholders, including customers, workers, and creditors. Nigeria's challenging business climate has led to many large corporations adopting low payout strategies, with high payouts causing slower growth and lower market prices. This study aims to examine the moderating effect of R&D expenditure on the relationship between dividend policy and firm performance in Nigerian consumer goods companies listed on the Nigerian Stock Exchange (2018 to 2022) using panel data. The sample size of the study is made up of nine (9) companies, which is determined using filtering sampling criteria. Dividend payout ratio (DPR), dividend yields (DY), and dividend coverage ratio (DCR) is used as proxies of dividend policy and ROE for firm financial performance. STATA version 17 is used in the study for both inferential and descriptive statistics. The study finds a significant positive relationship between dividend pay-out ratio, coverage ratio, and ROE, while a statistically insignificant relationship is found between dividend yield and ROE. It further reveals a negative significant moderating effect of R&D expenditure on the relationship between Dividend payout ratio (DPR), dividend coverage ratio (DCR) and ROE, but found no significant moderating effect of R&D expenditure on the relationship between dividend yield (DY) and ROE. The study concludes that R&D expenditure has a negative moderating effect on the relationship between dividend policy and financial performance of consumer goods companies in Nigeria. It is recommended that companies should balance short-term profitability with long-term growth potential when making R&D investment decisions. Capital structure and dividend policy decisions should also be considered, considering factors like industry characteristics, ownership structure, and macroeconomic conditions.

Keywords: R&D Expenditure, Dividends Policy, Firm Performance, Consumer Goods Companies, Nigeria.

Introduction

A company's ability to achieve a return on company ownership in the form of assets, capital, and debt is demonstrated by its performance, or work performance (Novriyani et al 2023). To achieve company performance, there needs to be

good control and synergy between the ownership and management functions. It's also claimed that strong business performance boosts firm performance. Good business performance will benefit communities, workers, suppliers of funds (creditors), and customers. (Christian &

Dewi, 2022). Several major corporations have recently left Nigeria due to the challenging business environment there; Unilever, GlaxoSmithKline (GSK), and other companies are just a few examples. The companies explained the effects of macroeconomic factors on dollar-denominated companies. (Iwayemi, 2023). Major multinationals have announced their 7th flight from Nigeria this year, with five leaving between August and December 2023, resulting in 6000 jobs. This follows a trend of divestment by oil and gas majors, including Shell, Exxon Mobil, Eni, and Equinor, who have divested £870 million from Nigeria since 2020. Over the past decade, they have sold 26 oil mining licenses, with Shell offloading £1.8 billion, Eni £4 billion, and ExxonMobil £11.9 billion (Punch Editorial Board, 2023). It is still challenging for most consumer goods companies in Nigeria to record profits at a steady, growing rate, and some are still having difficulty keeping their shareholders' interest in the business through dividend payments, despite the fact that the majority of them employ a low payout strategy. (Udoka et al., 2022).

However, dividend payout policies impact businesses differently (Burger 2013). High payout policies lead to higher current dividends and lower retained earnings, potentially causing slower growth and lower market price per share. Low payout

policies result in higher retained earnings, capital gains, and current dividends. Companies' investment decisions impact cash available for dividend payments. (Adeiza et al., 2020). In essence, any management wants to satisfy their investors and earn their trust by managing their funds. On the other hand, a corporate entity's capacity to distribute dividends to its stakeholders is contingent upon its profitability. It's interesting to note that a low dividend payout strategy is employed by the majority of publicly traded consumer goods companies in Nigeria that pay cash dividends. While some businesses use their shares as a means of paying dividends, others do not. All of these strategies aim to improve the company's performance by holding onto and protecting cash for growth and operations. (Udoka et al., 2022).

The change in how companies are assessed based on their financial performance has been attributed to dividends. Dividend pay-out is a crucial factor in the current business climate, especially when it comes to how companies are assessed for performance. The expectation of a return on investment is the main driver behind people's business investments. A dividend is a payment made by a company to its shareholders, usually in the form of a portion of its profits. When a business makes a profit or surplus, it can distribute

some of its profits as dividends to shareholders and reinvest the remainder as retained earnings. In the event that the business offers a dividend reinvestment plan, shareholders may receive the payout in cash (usually deposited into a bank account), additional shares, or share repurchasing. (Adeiza et al., 2020).

Conversely, R&D is defined as the result of creative activities (like those carried out within an organisation) over a specific time frame. (Zutter & Gitman 2012). It is anticipated that companies that invest more in R&D will make more profit than those that don't. (Wang 2011). Whereas a company's performance will always be greater than its R&D expenses. The benefits obtained from R&D will offset the costs after equilibrium is reached. Additionally, a company's performance level will depend on the resources it devotes to research and development. These are the ways to raise performance in this technological age (Siregar et al 2023).

However, the relationship between dividend policy and firm financial performance has garnered global attention, with a multitude of studies investigating this relationship in various contexts (Abeyasinghe & Kariyawasam 2023). Many theoretical frameworks provide insightful viewpoints on how decisions about dividend policy affect performance in both

developed and developing economies. These frameworks include agency, relevance, pecking order, bird-in-the-hand, residual, and signalling theory. (Adeiza et al., 2020; Nguyen et al., 2021; Perera, 2020; Udoka et al., 2022; Ugwu et al., 2020). However, the majority of research on the relationship between dividend policy and firm financial performance across nations was found to be inconsistent. (Jatoi et al., 2023; Nguyen et al., 2021; Perera, 2020; Shah, 2023; Theiri et al., 2023), likewise the developing economies (Adeiza et al., 2020; Bossman et al., 2022; Udoka et al., 2022; Ugwu et al., 2020; Ukpong & Ukpe, 2023). Furthermore, the researcher has not come across any study that combined the use of dividend pay-out ratio, dividend yield and dividend coverage ratio as proxies for dividend policy.

However, little is known about how Nigeria's unique business environment, with its unique features and difficulties, influences this relationship. Given the complexity and rapid evolution of the Nigerian market. Furthermore, if dividend policy could lead to firm performance (Jatoi, et al. 2023; Perera, 2020) in like manner research and development (R&D) leads to firm performance (Eldawayaty, 2020; Erdogan & Yamaltdinova, 2019; Habtewold, 2023; Khan & Sultan, 2020; Ozkan, 2022; Pervan & Kramaric, 2020;

Tung & Binh, 2021). The majority of R&D research, especially that which examines how R&D investment affects firm performance, is typically carried out in developed or industrialised nations (Tung & Binh, 2021). However, this and the inconsistencies found in the results of the relationship between dividend policy and financial performance show that there is a gap in the experimental research in the literature review concerning firms' R&D expenditure, dividend policy, and performance in both developed and developing nations—pretty much none at all. Therefore, based on aforementioned and the recommendation by Theiri et al. (2023), this study establishes the need to look into how R&D expenditure moderates the relationship between dividend policy and firm performance of Nigerian consumer goods companies.

1.1 Objective of the Study

1. To examine the effect of dividend pay-out ratio on financial performance of consumer goods companies in Nigeria.
2. To evaluate the effect of dividend yield on financial performance of consumer goods companies in Nigeria.
3. To assess the effect of dividend coverage ratio on financial performance of consumer goods companies in Nigeria.
4. To examine the moderating effect of R&D expenditure on the relationship between dividend pay-out ratio and financial performance of consumer goods companies in Nigeria.
5. To examine the moderating effect of R&D expenditure on the relationship between dividend yield and financial performance of consumer goods companies in Nigeria.
6. To assess the effect of R&D expenditure on the relationship between dividend coverage ratio and financial performance of consumer goods companies in Nigeria.

2.0 Review of Related Literatures

Rahel and Serkalem (2010) define performance as profitability, which is the financial objective of any firm and is used to fund expansion as well as act as a buffer against future slow periods. They propose that a company's profitability also helps to guarantee its solvency, allowing owners to make investments in the future. Businesses can fail if they experience losses and become insolvent, and profit is typically only realized when a business runs smoothly and profitably. Likewise, a dividend policy is defined as an announcement that a shareholder will receive dividends (DP). A dividend is a payment made to owners from profits. Dividends are given to shareholders as payment for their risk. The amount of

return on investment that shareholders will receive is decided by management. Factors other than DP primarily impact the company's performance. One of the four most important factors in finance is the distribution of dividends. (Jatoi et al., 2023).

However, R&D investment refers to the creative work businesses undertake to discover new information and concepts, convert them into products and services, and develop new procedures and products to expand and grow their operational activities. (Chung 2020). Corporate innovative activities involve investing resources in Research & Development (R&D), which drives better firm performance by developing capabilities, absorbing new technologies, and matching technological possibilities. Successful innovative activities also benefit consumers by enabling companies to develop new products and manage production processes more efficiently, thereby sustaining their market position. (Prahmod et al., 2012). R&D expenditures are the most significant periodic expenses connected with information expansion. Basic analysis, applied analysis, and experimental development are all parts of research and development. (Seraina, 2013). However, this study views R&D expenditure as a critical factor that is used in shaping a company's long-term growth

and competitiveness. R&D activities can lead to the development of new products and services, the improvement of existing products and processes, and the acquisition of new knowledge and expertise. Therefore, investing in R&D helps companies stay ahead of competition, adapt to changing market conditions, and respond to evolving customer needs. It also helps companies reduce production costs, increase efficiency, and enhance quality, which can lead to higher profitability and long-term sustainability.

2.1 Relationship between Dividends Policy and Firm Performance

Jatoi et al. (2023), assess whether dividend policies affect the performance of publicly traded non-financial companies in Pakistan, by employing regression analysis and descriptive correlation. The dividend policy is proxied by the dividend payout ratio, dividend payout ratio, earnings per share, and financial leverage in the study. The firm performance is measured by ROA and ROE. The findings indicate a significant positive relationship between dividend policy and ROE. Furthermore, a strong positive correlation was discovered between ROA and Dividends Policy, which takes into account all of the variables FL, EPS, DPS, and DPOR. As a result, this study offers proof that dividend

policies significantly affect the company performance.

Similarly, Theiri et al. (2023), investigate the relationship between performance and financial constraints to ascertain how such a fit affected dividends policy during the French crisis using a sample size of 106 SBF-listed companies. They do this by using system generalized methods of moments (SGMM) and financial constraints theory to assess the impact of the Covid-19 pandemic crisis on dividends policy and performance. The study measures dividend policy, financial constraints, and performance using dividend payout per share, the KZ index, ROA, and ROE, respectively and debt, growth, firm size, and age as control variables. The findings demonstrated that the only variables that negatively correlated with dividend payment levels were the crisis and financial constraints. There is no consideration of performance at this dividend level. The only control variables that had a positive impact on dividend levels were debt, growth, and size. Furthermore, the DividPaid, KZindex, and Crisis variables had a negative impact on the performance of French companies. In a comparable vein, Shah (2023), investigates the moderating effect of the pandemic-related crisis period on the association between the dividend policy and the firm performance of 433

Indian companies. Dividend policy and firm performance are proxied by dividend pay-out, ROA, and EPS. The study offered evidence of the moderating influence of crises on the relationship between dividend policy and performance. Furthermore, liquidity and leverage have a positive and significant impact on the firm's financial performance, while firm size and dividend pay-out have no significant effect on the company's performance.

Moreover, Nguyen et al. (2021), examine the effects of dividend policies on the financial performance of 450 Vietnamese firms using signalling theory, pecking order, and relevance. The firm's financial performance and dividend payment were measured using the dividend rate, dividend decision, ROA, ROE, and Tobin's Q, respectively. The control variables include company size, leverage ratio, and growth rate (Growth). According to the results analysis, Vietnamese firms' accounting-based performance is negatively impacted by the dividend payment decision; however, this also raises market expectations for the firms. The study also discovers that low dividend rates are offered by Vietnamese companies, which has a significant effect on accounting-based performance but a negative effect on market expectations.

Furthermore, utilising the bird-in-the-hand, residual, irrelevance, and signalling, Pecking Order theory, Perera (2020), investigates how dividend policies affect the long-term financial performance of 305 Sri Lankan listed companies. DPR, ROA, debt-to-equity ratio, company growth, and EBITDA are used in the study as measures for dividend policy and the firm's financial performance respectively. The study's findings show a significant relationship between the dividend pay-out ratio and revenue growth, return on equity, total debt-to-equity, and net debt to EBITDA. The behaviour of the dividend policy and performance for both past and future forecasting years has been demonstrated by trend analysis. Ukpong and Ukpe (2023), also employ the bird-in-hand theory to examine the impact of dividend policy on the performance of 12 Nigerian firms from 2015 to 2019 based on ex post facto research design. The study uses EPS, ROA, timing of dividend payments (TDP), and forms of dividend payment (FDP), as proxies for firm performance and dividend policy, respectively. The results show a negative relationship between ROA and earnings per share (EPS) and timing of dividend payments (TDP), but a positive relationship between ROA and the type of dividend payment.

Equally, Bossman et al. (2022), investigate the relationship between the dividend

policy and financial performance of 29 Ghanaian listed companies using system generalised methods of moments (SGMM). The study uses free cash flow, dividend capacity, pay-out, and savings from free cash flow as proxies for dividend policy and ROA, ROE, stock price, and Tobin's Q for firm performance, while control variables include capital structure, firm size, age, governance, and financial sector clean-up. The result demonstrates that dividend capacity has had a significant effect on return on equity and return on assets. It is discovered that free cash flow savings had an indirect relationship with Tobin's Q and stock price, but a direct and significant effect on ROE and ROA. The results showed that clean-ups in the financial sector had a negative effect only on the performance of non-financial firms.

Udoka et al. (2022), evaluate the significance of dividend policy and recommend actions that could improve its efficacy on the performance of 26 consumer goods firms in Nigeria using an ex-post facto research design, dividends relevancy, and the bird-at-hand theory. Companies' dividend pay-out ratio (DPR), dividends per share (DPS), and dividend yield were used as proxies for dividend policy and ROE for firm performance along with the CG index as a moderating variable. The results of the analysis show that the dividend pay-out ratio is not

statistically significant over the long and short terms in the absence of the moderating variable, the corporate governance index. Comparably, Ugwu et al. (2020) use ex-post facto research, correlation, agency, signalling, and bird-in-hand theory to assess the impact of dividend policy on corporate financial performance using data from ten carefully chosen listed consumer goods companies in Nigeria between 2015 and 2019. DPR and DPS was used to proxy dividend policy while ROE and EPS was use for financial performance. The findings indicate a positive correlation between DPR, DPS and ROE and EPS. It also showed that, during the study period, DPS is statistically significant with ROE, but DPR were statistically insignificant with ROE and EPS.

Additionally, Adeiza et al. (2020), employ ratio analysis and residual theory to investigate the effect of the dividend pay-out ratio (DPR) on the net profit margin of quoted oil and gas companies, the effect of the DPR on the ROA (return on assets) of these companies, and the effect of the DPR on the ROE (return on equity) of two quoted oil and gas companies. NPM, ROE and ROA were used as proxies for firm performance. The study discovers that the DPR had a negative and insignificant effect on firm performance in 2017 and 2018, but the results also revealed that

performance had significant effects in 2015 but insignificant effects in 2016.

From the foregoing, previous studies use agency, irrelevance, pecking order, bird-in-the-hand, residual, signalling theory, financial constraints theory to test the impact of dividend policy decisions on performance and reveal inconsistent results (Adeiza et al., 2020; Nguyen et al., 2021; Perera, 2020; Udoka et al., 2022; Ugwu et al., 2020; Theiri et al. 2023). In measuring both dividend policy and financial performance, Jatoi et al. (2023) use DPR, EPS, financial leverage, ROA and ROE, Theiri et al. (2023) use dividend payout per share, the KZ index, ROA, and ROE, Shah (2023) employ dividend pay-out, ROA, and EPS, Nguyen et al. (2021) use dividend rate, dividend decision, ROA, ROE, and Tobin's Q, Perera (2020) employ DPR, ROA, debt-to-equity ratio, company growth, and EBITDA, Ukpong and Ukpe (2023), use timing of dividend payments (TDP), and forms of dividend payment (FDP), EPS and ROA, Bossman et al. (2022) employ free cash flow, dividend capacity, pay-out, savings, ROA, ROE, stock price, and Tobin's Q, Udoka et al. (2022) employ dividend pay-out ratio (DPR), dividends per share (DPS), and dividend yield and ROE, Ugwu et al. (2020) use DPR, DPS ROE and EPS, while Adeiza et al. (2020) employ DPR, NPM, ROA and ROE. Most of the studies

use secondary data and the duration of the use of the data ended in 2020. The choice for the proxies by the previous studies was obviously because of the research design and objectives of the studies.

In conclusion, from the empirical review above, it could be seen that the results of the findings between dividend policy and financial performance were mostly inconsistent and the proxies used in measuring the financial performance were also mostly accounting-based. Likewise, none of the studies had used any of the theories above to test the relationship between a moderator, dividend policy and financial performance. Therefore, this study sees the need to introduce a moderating variable that will either strengthen or weaken the relationship between the variables under study. Consequently, this study uses resource-based theory to test the relationship between R&D expenditure, DPR, DY, DCR and ROE.

2.2 Research and Development (R&D) as a Moderator

Habtewold (2023) uses a combination of fixed-effect, propensity score matching, and endogenous treatment effect estimation techniques to investigate the effects of R&D investment on the performance and energy consumption of 476 Ethiopian enterprises. Tobin's Q,

annual sales and profit levels, R&D investment as the independent variable, and energy consumption and firm performance as the dependent variables are all measured using dummy variables in the study. It employs dummy variables as a proxy for credit, with business licencing and tax administration, being the moderating variables. Results show that R&D investments has a negative effect on energy consumption and short-term financial performance, a positive effect on innovation and long-term financial performance. Ozkan (2022) examines the relationship between the financial performance of the top 500 industrial enterprises in Turkey and their R&D expenditures across 25 industrial sub-sectors between 2013 and 2019. The dependent variable which is financial performance, is proxied by ROA, ROE, and ROS, while the independent variable was the ratio of R&D Expenditures to Net Sales. The study's conclusions show that the subsectors' current year R&D spending has a negative effect on their financial performance, but that effect eventually turns positive after a year. Nevertheless, over time, this beneficial effect reverses to a negative one and cannot be maintained. These empirical results are also supported by the robustness test.

Tung and Binh (2021), examine the effect of research and development (R&D)

investments on the performance of firms in emerging markets, focusing on 343 listed Vietnamese companies between 2010 and 2018. The study uses revenues, profits, ROA, and ROE as proxies for firm performance, with the ratio of R&D expenditure to total revenue of a firm serving as the dependent variable. The findings indicate that spending on research and development (R&D) boosts earnings, profits, return on equity (ROE), and returns on assets (ROA). Regression analysis also reveals that companies with high R&D do better in terms of profit, revenue, and ROA than those with low R&D.

Using survey data, Khan and Sultan (2020) investigate how R&D affects the performance of 1247 Pakistani manufacturing companies. Product and process innovation, absorptive capacity, firm age and size, networking, exports, and labour productivity as measured by Total Sales/Total Employees are among the study's variables. The findings show that age, networking, export-orientedness, absorptive capacity, and process innovation are all positively related to firm performance. This suggests that businesses that invest in new technology and innovation experience higher productivity growth. While product innovation, R&D, and firm size all have a negative effect on a company's performance. Ying (2020),

uses a large amount of data from Chinese companies from the years 2010 to 2018 to investigate the short- and long-term effects of R&D activities and internationalisation on firm performance. The study measures R&D activities and ROA, Tobin's Q for firm performance with internationalisation acting as a moderating variable, using the ratio of real R&D to one-period lagged real total assets. The study's findings indicate that: (1) internationalization and R&D activities have a short-term negative impact on firm performance, but a long-term positive influence; and (2) internationalization has a moderating effect on the relationship between R&D activities and firm performance. Eldawayaty (2020), investigates the relationship between R&D intensity, firm value and financial performance of thirteen pharmaceutical companies listed on the Egyptian Stock Exchange in Egypt from 2000 to 2019. The study measured R&D Intensity using the ratio of R&D expenditures to total revenues and ROA, ROE, ROS, Tobin's Q for financial performance and firm value, respectively. The results indicate a significant negative relationship between R&D intensity and current performance as determined by ROE and ROS. The results, however, indicated a negligible negative relationship with ROA. Conversely, the results showed a negligible positive relationship with

ROE and ROS and a significant positive relationship with future firm performance as determined by ROA alone and Tobin's Q.

Pervan and Kramaric (2020), examine the impact of research and development (R&D) expenditure on the performance of the top 50 manufacturing companies in Croatia in 2018. While ROA and NPM are used to measure firm performance, R&D expenditure was measured in relation to total revenues as well as total assets. The conducted analysis's results showed that R&D expenditure may have a positive or negative impact on a firm's performance, depending on the regress and variable used. However, neither of the regression analyses produced statistically significant results for this influence. It is discovered that the factors of firm size, age, and liquidity have a positive and statistically significant impact. Using panel data methods, Erdogan and Yamaltdinova (2019), examine the effect of R&D expenditures on the financial performance of 62 production companies listed in Borsa Istanbul between 2008 and 2017. While ROA and ROE are used to measure financial performance, R&D expenditures are measured using R&D intensity and R&D expenditures over total sales. The study's conclusions are consistent with the notion that financial performance and

R&D expenditure have a positive relationship.

However, previous studies have shown that dividend policy relates to financial performance, in like manner R&D activities relate to financial performance. However, the study does not come across any of the previous studies that used R&D activities to moderate between dividend policy and other variables rather Diéguez-Soto et al (2018) are found to have used R&D intensity to moderate between family management and firm performance in Spanish private manufacturing firms. Equally, Hung and Chou (2013) use both internal R&D and environmental turbulence to moderate between open innovation on firm performance. This shows that R&D expenditure could be a good moderator between dividend policy and financial performance of consumer goods companies in Nigeria.

2.3 Theoretical Framework

2.3.1 Resource-based Theory

The Resource-Based theory (RBT) is proposed by Jay Barney, also known as J. B. Barney, in 1986. According to the theory, a company may have a competitive advantage over its rivals due to its distinct resources and capabilities. RBT states that investing in R&D can result in the creation of new goods, technology, or procedures

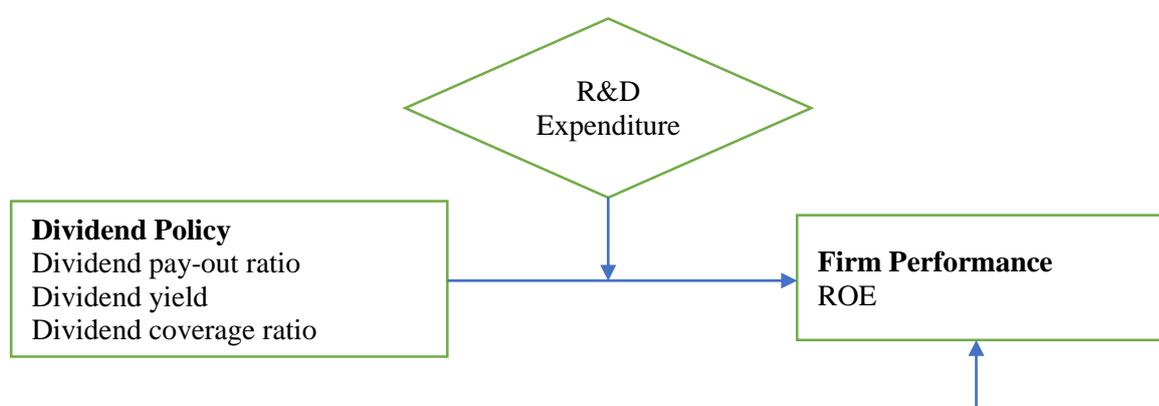
that can raise a company's profitability and competitiveness. On the other hand, a company that pays large dividends might not have as much funds available for R&D expenditures and might not be able to maintain its competitive advantage over time. A company may, however, create new goods or technology if it makes significant R&D investments, giving it a competitive edge over rivals. A higher stock price and better financial performance could result from this.

However, the company may not have as much funds available for R&D investments if it pays large dividends, which could make it more difficult for it to maintain its competitive advantage. Furthermore, RBT contends that the uniqueness, and non-substitutability of a firm's assets and competencies determine their value. In general, resource-based theory indicates that firms can leverage both dividend policy and R&D spending as significant strategic tools to improve their financial performance and competitive edge. It is important to consider these relationships in the context of other strategic resources and capabilities because the precise nature of these

relationships may vary depending on a number of underlying factors, including the industry context, firm size, and other strategic resources and capabilities.

2.4 Conceptual Framework

This study analyses the moderating effect of R&D expenditure on the relationship between dividend policy and financial performance of consumer goods companies in Nigeria. This study uses DPR, DY, DCR, and ROE as proxies to analyse a company's dividend policy and financial health. These measures help investors understand dividend pay-out behaviour, expected return on investment, and earnings generation. ROE captures a company's growth potential, and future profitability, and helps managers evaluate performance and identify improvement areas. For the purpose of either strengthening or weakening the relationship between variables, R&D expenditure is used as a moderating variable. The research concept, which is a logical relationship derived from the theoretical foundation and empirical study, is compiled based on the explanation provided. It can be summarised as follows:



Independent Variable

Dependent Variable

Figure 1 Research Model

The following research hypotheses are based on the conceptual framework:

Hypothesis

H₀₁: Dividend pay-out ratio affects financial performance of consumer goods companies in Nigeria.

H₀₂: Dividend yield affects financial performance of consumer goods companies in Nigeria.

H₀₃: Dividend coverage ratio affects financial performance of consumer goods companies in Nigeria.

H₀₄: R&D expenditure moderates the relationship between dividend pay-out ratio and financial performance of consumer goods companies in Nigeria.

H₀₅: R&D expenditure moderates the relationship between dividend yield and financial performance of consumer goods companies in Nigeria.

H₀₆: R&D expenditure moderates the relationship between dividend coverage ratio and financial

performance of consumer goods companies in Nigeria.

3.0 Research Method

The study is based on ex-post facto research design, while the population includes 21 consumer goods firms listed on the Nigerian Stock Exchange during the 2018-2022 period. These years were chosen because there was no study of the same nature that was conducted during the period. The category of data used in the study is secondary with a quantitative approach. The secondary data collection method is done by observing the data sources from consumer goods firms in Nigeria that have adequate R&D expenditure obtained from (<https://ngxgroup.com/>), and company websites. The research sample size consists of nine (9) firms and is obtained by using filtering sampling criteria, namely the method of selecting samples based on predetermined criteria. Criteria used for sampled manufacturing companies obtained from ngxgroup.com include: the company must have been listed on NSE as of 2018, there should be no change in the

fiscal year during the period, there should be no transaction cease for more than six months, the required data should be available.

3.1 Model Specification

The paper discovers that the majority of studies have examined the effect of dividend policy on the financial performance of the companies through a review of the literature on earlier research models. The following research model (Figure 1) is built on ROE as a measurement of the firms’ financial performance and dividend payout ratio (DPR), dividend yield (DY), and dividend

coverage ratio (DCR) as proxies for dividends policy. This measure is consistent with other researches like Bossman et al. (2022), Jatoi, et al. (2023), Udoka, et al. (2022), Ugwu, et al. (2020). The R&D being the moderating variable was measured by ratio of R&D expenditure to the total revenue of a firm. This also is consistent with Tung and Binh (2021), Pervan and Kramaric (2020) and Eldawayaty (2020). While firm size, firm age and financial leverage was used as control variables. The study employs STATA version 17 to run both the descriptive and inferential statistics.

$$ROE = \alpha + \beta_1DPR_{it} + \beta_2DY_{it} + \beta_3DCR_{it} + \beta_4FS_{it} + \beta_5FA_{it} + \beta_6FL_{it} + \epsilon_{it} \dots \dots \dots (i)$$

$$ROE = \alpha + \beta_1DPR_{it} + \beta_2DY_{it} + \beta_3DCR_{it} + \beta_4R\&D_{it} + \beta_5DPR * R\&D_{it} + \beta_6DY * R\&D_{it} + \beta_7DCR * R\&D_{it} + \beta_8FS_{it} + \beta_9FA_{it} + \beta_{10}FL_{it} + \epsilon_{it} \dots \dots \dots (ii)$$

Where:

ROE = Return on equity (the ratio of net income to shareholder’s equity).

α = Constant.

β = Regression Coefficient.

DPR = Dividend payout ratio (the ratio of dividend per share to earnings per share).

DY = Dividend yield (the ratio of annual dividend per share to stock price per share).

DCR = Dividend coverage ratio (the ratio of earnings per share to dividend per share).

R&D = Research and development (R&D expenditure to the total revenue of a firm).

FS = Firm size proxied by the natural logarithm of total assets of the selected companies.

FA = Firm age of the selected firms.

ϵ = error term.

4.0 Discussions and Findings.

4.1 Descriptive Statistics.

Table 1 Descriptive Statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE	45	.301	.338	-.112	.992
DPR	45	1.025	.508	.366	2.087
DY	45	.118	.216	.004	.711

DCR	45	1.261	.689	.22	2.75
R&D	45	.026	.02	.002	.089
FS	45	7.571	1.046	4.764	8.59
FA	45	44.889	4.432	39	57
FL	45	.214	.437	-.872	.701

Source: STATA OUTPUT

The companies' average mean of ROE, as shown in Table 1, is 0.301, which indicates that the companies are profiting 30.1% on their equity investment. The standard deviation of 33.8% shows that the ROE values are relatively dispersed around the mean value. The minimum and maximum ROE values of -11.2% and 99.2%, respectively, show that some among the companies are losing on their equity investment, while other companies are significantly profitable, demonstrated by their high ROE of 99.2%. Similarly, the standard deviation of DPR is 50.8%, and its mean is 102.5%. Some companies pay a low dividend, as indicated by the minimum DPR value of 36.6%, and some pay very high dividends, as indicated by the maximum DPR value of 208.7%. The average mean of DY is 11.8%, and the standard deviation is 21.6%. While some companies have a very high dividends yield, as indicated by the maximum DY value of 71.1%, and some companies have a very low dividend yield, as indicated by the minimum DY value of 0.4%. Also, the average mean of DCR is 126.1%, and its standard deviation is 68.9%. While some companies have a high ability to cover

their dividend payments, as indicated by a maximum DCR value of 275%, some have a low dividend coverage, as indicated by a minimum DCR value of 22%. Likewise, on the moderating variable, the mean of R&D is found to be 2.6%, while the standard deviation is 2%. The R&D value ranges from 0.2% as the minimum, indicating low R&D activities in some companies, to 8.9% as the maximum, indicating the level of R&D activities in some companies. However, on the control variables, the mean of the firm size is 757.1%, and the standard deviation is 104.6%, with 476.4% as the minimum and 859% as the maximum value. This indicates that the companies are moderately sized on average, with a narrow range of variation. The mean for firm age is 4488.9%, and the standard deviation is 443.2%, with a minimum of 39 and a maximum of 57 years. This shows that there is a significant range in the companies' ages, with an average age that is moderate. Likewise, financial leverage has a mean of 21.4%, and a standard deviation of 43.7% with minimum and maximum of -87.2% and 70.1% respectively which shows the debt

financing capacity of the companies is very high. This implies that the companies are capable of securing an adequate amount of debt financing from a range of sources, including bond markets, banks, and other financial organisations.

Companies can benefit from having a high debt financing capacity because it enables them to finance operations and investments without losing control or diluting ownership.

4.2 Correlations Analysis

Table 2 Matrix of correlations.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) ROE	1.000							
(2) DPR	-0.078	1.000						
(3) DY	-0.281	0.306	1.000					
(4) DCR	0.125	-0.905	-0.195	1.000				
(5) R&D	-0.091	0.397	0.132	-0.383	1.000			
(6) FS	0.070	0.112	0.164	-0.036	-0.292	1.000		
(7) FA	-0.307	0.443	0.722	-0.355	0.139	0.302	1.000	
(8) FL	-0.062	0.066	0.430	-0.015	-0.449	0.803	0.400	1.000

Source: STATA OUTPUT

The study establishes the correlation coefficient to discover the influence of R&D on the relationship between dividends payout ratio, dividends yield, dividends coverage ratio and ROE together with firm size, firm age and financial leverage as control variables. The correlation test is highly significant because it establishes the presence or absence of a correlation between the research variables before undergoing regression analysis. The fundamental parameters of the correlation coefficient matrix are as follows: coefficient values of 0.70 and above indicate high correlations, 0.40 to below 0.50 indicate low correlations and 0.00 to below 0.40 of the

variables indicate poor correlations (Chen & Popovich, 2002). Subsequently, from Table 4 DPR has a low but negative correlation with ROE, with a $r = -0.078$. This means that there is a slight tendency for companies that pay higher dividends to have lower ROE, but the relationship is not very strong. DY has a low and negative correlation with ROE, with a correlation coefficient of -0.281 . This suggests that there is a tendency for companies with higher dividend yields to have lower ROE, and though the relationship between the two variables is not weak, but also not very strong. Similarly, DCR has a poor positive correlation with ROE, with $r = 0.125$, which suggests that there is a slight

tendency for companies with higher DCR to have higher ROE, but the relationship between the two variables is also not very strong. R&D has a poor and negative correlation with ROE, with $r = -0.091$, which suggests that there is a slight tendency for companies that spend more on R&D to have lower ROE.

Firm size has a positive but poor correlation with ROE, with $r = 0.070$, which also shows that larger companies tend to have higher ROE. Firm age also has a poor and negative correlation with ROE, with $r = -0.307$, which indicates that older companies tend to have lower ROE. While financial leverage has a poor but

negative correlation with ROE, with $r = -0.062$. This means that as financial leverage increases, ROE tends to decrease, but the relationship between the two variables is not very strong. The negative correlation between FL and ROE is not surprising, as higher levels of debt financing (which increase financial leverage) can increase the cost of capital and reduce profitability, which in turn can lower ROE. However, the correlation results reveal that variables such as DPR, DY, R&D, firm age and financial leverage are negatively related to ROE, while DCR and firm size are positively related to ROE.

4.3 Diagnostic Tests.

4.3.1 Normality Test.

Table 3 Skewness/Kurtosis tests for Normality.

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj_chi2(2)	Prob>chi2
ei	45	0.014	0.475	6.070	0.048

Source: STATA OUTPUT

The data has an approximately normal distribution, as shown by the skewness value of 0.014 and kurtosis value of 0.475 in Table 2, and the data of the independent variables relates linearly to the dependent variable. Brown (2006) suggests that, the measured values of skewness and kurtosis less than 3 are generally acceptable in

most cases. Similarly, the probability of chi-square (Prob>chi2) and adjusted chi-square (adj_chi2) values indicate a significant normal distribution based on 0.05 level of significance. This suggests that, the normality assumptions are met and the skewness and kurtosis values are within acceptable limits.

4.3.2 Heteroskedasticity Test.

Table 4 Heteroskedasticity Test.

	chi2(1)	Prob > chi2
--	---------	-------------

Variables: fitted values of
roe

Breusch-Pagan / Cook-Weisberg	5.99	0.0144
Ho: Constant variance	Do not reject	Reject

Source: STATA OUTPUT

The Breusch-Pagan and Cook-Weisberg tests are used in this investigation to identify the heteroskedasticity problem. Table 3 shows that the chi-square 5.99 from the Cook-Weisberg and Breusch-4.3.3 Multicollinearity Test

Pagan tests for heteroskedasticity which has a p-value of 0.0144 which is less than 0.05 (5%) level of significance in the ROE model and indicates the presence of heteroscedasticity on the model's residuals.

Table 5 Variance inflation factor

	VIF	1/VIF
DPR	6.666	.15
DCR	6.055	.165
FL	4.143	.241
R&D	1.513	.661
FS	3.673	.272
DY	2.832	.353
FA	2.556	.391
Mean	3.920	.
VIF		

The theoretical demarcation of the VIF ranges from 1 to 9 as suggested by some scholars and 1 to 5 by other scholars. However, this study adopts the range of 1 to 9 for the VIF of each explanatory variable. Therefore, any variable with a VIF greater than 9 indicates the existence of Multicollinearity, this is in line with Gujarati (2004). On the assumption of Multicollinearity among the explanatory variables, the result in Table 5 shows no evidence of Multicollinearity among the independent variables of the study because

none of them has a VIF greater than 10. This is in line with Hair et al (2010), that the means VIF should not exceed 10. This implies if the VIF exceeds ten, then the problem of Multicollinearity exists and it has to be addressed. The mean VIF presented in Table 5 above indicates that each explanatory variable has a coefficient of 3.9, the overall average (3.9) is far less than 10. The study concludes that there is no Multicollinearity among the independent, moderating and control variables which include dividend pay-out

ratio (DPR), dividend coverage ratio (DCR), dividend yield (DY), research and development (R&D), firm size (FS), firm

age (FA) and financial leverage (FL), therefore the condition for using the regression analysis is satisfied.

4.4 Regression Result

Table 6 Multiple Linear regression

ROE	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
DPR	.853	.413	2.07	.047	.014	1.692	**
DY	-.519	.766	-0.68	.503	-2.075	1.038	
DCR	.58	.241	2.41	.022	.09	1.069	**
R&D	38.538	16.381	2.35	.025	5.247	71.828	**
DPR*R&D	-20.354	8.911	-2.28	.029	-38.463	-2.244	**
DY*R&D	24.357	26.93	0.90	.372	-30.372	79.086	
DCR*R&D	-19.232	8.051	-2.39	.023	-35.593	-2.871	**
FS	.11	.096	1.15	.256	-.084	.304	
FA	-.044	.023	-1.95	.06	-.09	.002	*
FL	-.186	.283	-0.66	.516	-.762	.39	
Constant	.006	1.061	0.01	.995	-2.151	2.163	
Mean dependent var		0.301	SD dependent var			0.338	
R-squared		0.298	Number of obs			45	
F-test		1.445	Prob > F			0.203	
Akaike crit. (AIC)		35.255	Bayesian crit. (BIC)			55.128	

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: STATA OUTPUT

4.4.1 Hypothesis Testing:

Based on Table 6 results, the coefficient of determination (R^2), which measures the model's fitness, is 0.298. This indicates that explanatory variables account for approximately 29.8% of the variation in the dependent variable, while unspecified variables, like the error term, account for approximately 70.2% of the variation in the manufacturing companies' firm return on equity (ROE) during the period. The F-test value shows that the model is fit.

H_{01} : Dividend pay-out ratio affects financial performance of consumer goods companies in Nigeria.

The coefficient value of DPR = 0.853, which suggests that for every unit increase in DPR, the ROE of consumer goods companies in Nigeria increases by 85.3%. The test result reveals a t-value = 2.07 and p-value = 0.047 < 0.05 level of significance. This shows that the relationship is positive and statistically significant. This means DPR affects the

ROE of consumer goods companies in Nigeria. Therefore, this study accepts the first hypothesis. This result is in line with the findings of Jatoi et al. (2023), Bossman et al. (2022) and contradicts Udoka et al., (2022), Ugwu et al., (2020), and Adeiza et al., (2020).

H₀₂: Dividend yield affects financial performance of consumer goods companies in Nigeria

The test result between DY and ROE reveals a coefficient value of $DY = -.519$ with a t-value = -0.68 and p-value = 0.503 > 0.05 level of significance, which suggests that the relationship between DY and ROE is statistically insignificant. Therefore, this study fails to accept the second hypothesis. This depicts that DY does not affect ROE. This result is not in line with the findings of Udoka et al. (2022) and Nguyen et al. (2021).

H₀₃: Dividend coverage ratio affects financial performance of consumer goods companies in Nigeria.

The coefficient value of $DCR = 0.58$, which suggests that for every unit increase in DCR, ROE increases by 58%. The test result reveals a t-value = 2.41 and p-value = 0.022 < 0.05 level of significance. This depicts that the relationship is positive and statistically significant which also means that DCR affects the ROE of consumer goods companies in Nigeria. Therefore,

this study accepts the third hypothesis as valid. This result is in line with Bossman et al. (2022). The findings of the tests of the first, and third hypotheses demonstrate that the dividend policy affects the performance of the consumer goods companies under study, while the second hypothesis reveals a contrary result.

H₀₄: R&D expenditure moderates the relationship between dividend pay-out ratio and financial performance of consumer goods companies in Nigeria.

The coefficient value of $DPR * R\&D = -20.354$, this suggests that for every unit decrease in $DPR * R\&D$, ROE decreases by -2035.4%. The test result reveals a t-value = -2.28 and p-value = 0.029 < 0.05 level of significance. This shows that the relationship is negative and statistically significant. This means that R&D expenditure moderates the relationship between DPR and ROE of consumer goods companies in Nigeria. Therefore, this study accepts the fourth hypothesis.

H₀₅: R&D expenditure moderates the relationship between dividend yield and financial performance of consumer goods companies in Nigeria

The test result between $DY * R\&D$ reveals a coefficient = 24.357 with a t-value = 0.90 and p-value = 0.372 > 0.05 level of significance. This means the relationship is

statistically insignificant, which indicates that R&D expenditure does not moderate the relationship between DY and ROE. Therefore, this study failed to accept the fifth hypothesis.

H₀₆ R&D expenditure moderates the relationship between dividend coverage ratio and financial performance of consumer goods companies in Nigeria.

The coefficient value of $DCR \cdot R\&D = -19.232$, this means that for every unit decrease in $DCR \cdot R\&D$, ROE decreases by -1923.2%. The test result reveals a t-value = -2.39 and p-value = $0.023 < 0.05$ level of significance. This shows that the relationship is negative and statistically significant. This suggests that R&D expenditure moderates the relationship between DCR and ROE of consumer goods companies in Nigeria. Therefore, the study accepts the sixth hypothesis as valid. The results of the fourth, and sixth hypotheses tests prove that R&D expenditure was able to strengthen or weaken the relationship between dividend policy and firm financial performance, while the result of the sixth hypothesis proves otherwise. The findings no 5 and se7th hypotheses support the Resource-based theory put forward by Jay Barney (1986) that if a firm invests heavily in

R&D, it could lead to improved financial performance and a higher stock price.

The test result between firm size and ROE, the coefficient value = 0.11 with a t-value of 1.15 and p-value = $0.256 > 0.05$ level of significance which is statistically insignificant, meaning that the firm size does affect ROE. This suggests that when investors make investments, they do not take into account the size of the company, as determined by the natural log of total assets. Moreover, management's asset management has not been optimised, which prevents the companies from reaching their target of high ROE. Therefore, there is no certainty that businesses with substantial assets will turn a profit greater than those with smaller total assets. Thus, ROE is unaffected by firm size. The test result between firm age and ROE, the coefficient value = -0.044 with a t-value = -1.95 and p-value of $0.06 > 0.05$ level of significance, this suggests the relationship is statistically insignificant. This may indicate that older companies have lower ROE. This means that the financial performance of a company is not significantly influenced by how long the company has been in operation. This could be due to several factors, such as the ability of the company to adapt to changes in the market, the efficiency of its operations, or its ability to innovate and stay competitive. The test

result between financial leverage and ROE, the coefficient value = -0.186 with a t-value = -0.66 and p-value of 0.516 > 0.05 level of significance, which suggests that the relationship is statistically insignificant. This means that there is a 51.6% chance that the observed relationship between financial leverage and ROE is due to random chance, rather than a real relationship between the two variables.

5.0 Conclusion

The results of the analysis discovered positive and statistically significant relationship between dividend pay-out ratio (DPR), dividend coverage ratio (DCR) and ROE, in the same vein found a statistically insignificant relationship between dividend yield (DY) and ROE. Therefore, this study concluded that dividend policy affects firm financial performance of consumer goods companies in Nigeria. Moreover, the study also discovered a negative significant interaction effect between R&D expenditure, DPR, DCR, and ROE. Therefore, this study concluded that R&D expenditure has a negative significant moderating effect on the relationship between DPR, DCR, and ROE. Similarly, the study does not find a significant moderating effect of R&D expenditure on the relationship between DY and ROE. Therefore, it can be concluded that R&D

expenditure does not have a significant moderating effect on the relationship between DY and ROE. The findings of the interaction between R&D expenditure, DPR, DCR, and ROE further affirmed the assertion of the resource-based theory that if a firm invests heavily in R&D, it will develop new products or technologies that give it a competitive advantage over its rivals. This could lead to improved financial performance and a higher stock price. Therefore, this study concludes that investing in R&D activities improves the relationship between dividend policy and firm financial performance. However, if the firm pays high dividends, it may have fewer resources available for R&D investments, which may hinder its ability to sustain its competitive advantage.

5.1 Recommendations

Based on the findings, it is recommended that companies should carefully consider the impact of R&D investment on their financial performance. While R&D investment can be important for long-term growth and competitiveness, it may also reduce profitability in the short term, as the outcomes of R&D projects can be uncertain and may not lead to successful innovations.

Therefore, companies should carefully balance the trade-offs between short-term profitability and long-term growth potential when making R&D investment

decisions. Companies should also evaluate their capital structure decisions in light of their R&D investment strategy, as high levels of debt or dividend pay-outs may limit their ability to invest in R&D and innovation.

This study also suggests that dividend policy decisions may be less affected by R&D investment and more influenced by other factors, such as industry characteristics, ownership structure, and macroeconomic conditions. However, it's worth noting that the optimal dividend policy for a given company depends on its specific circumstances, and companies should carefully consider their dividend policy decisions in light of their overall business strategy and financial goals.

5.2 Theoretical Implication

The resource-based theory (RBT) suggests that a firm's resources, including R&D, can provide a competitive advantage and superior financial performance. In Nigeria, R&D expenditure moderates the relationship between dividend policy and financial performance. Factors like ownership structure, industry characteristics, and macroeconomic conditions may also play a role. RBT emphasizes the importance of R&D expenditure for consumer goods companies and the need to balance short-term pay-outs with long-term growth

potential for optimal financial performance and shareholder value.

5.3 Policy Implication

The study suggests that Nigerian consumer goods companies should balance dividend policy decision with R&D investment to optimize financial performance and shareholder value. It also emphasizes the need for strategic and context-specific management of the relationship between R&D expenditure, dividend policy, and financial performance measures. Factors like industry characteristics, ownership structure, and macroeconomic conditions should also be considered.

5.4 Suggestions for Future Research

Future studies could examine the effect of R&D investment on other financial performance measure, such as earnings per share (EPS) or market value. This could help companies better understand the trade-offs between R&D investment, dividend policy, and other financial measures, and make more informed investment decisions. Future studies could also explore the effect of other moderating factors on the relationship between R&D investment, dividend policy, and financial performance measures. For example, industry characteristics, ownership structure, and macroeconomic conditions may all play a role in shaping the relationship between these variables.

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Moderating Effect of Interest Rate on the Relationship between Investment Decision and Financial Performance of Listed Consumer Good Firms' in Nigeria

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ABSTRACT

The study examines the moderating effect of interest rate on the relationship between investment decision and financial performance of listed consumer goods companies in Nigeria. The data were extracted from the annual reports and accounts of the companies for a period of 14 years (2009-2022). Panel data was used and ex-post factor research design was employed. The inferential statistics were used to analyze the panel data using Stata (version 17). GLS poolability test was conducted to determine both direct and indirect relationship between interacting, endogenous and exogenous variables. Hausman specification test was conducted and the finding from the both models suggested for random effect and was confirmed using lagrangian multiplier test. The result shows that interest rate does not moderate the relationship between investment in tangible asset decision and investment in working capital decision which is statistically not significant on financial performance measure by ROA. However, the study findings reveal that interest rate moderate the relationship between leverage investment decision and financial performance of selected consumer goods companies in Nigeria. It is recommended that companies should pay more attention to leverage investment decision as it affects their performance significantly. Hence, interest rate moderates the relationship between firms' investments decision on leverage on their financial performance.

Introduction

Performance remains the most crucial mechanism used in gauging the efficiency and effectiveness of firms' management. It determines the profitability of the companies thereby enhance shareholders wealth. Globally manufacturing sector is experiencing changes that affect their operation adversely for many decades. These changes are ascribed to implementation of technological innovation, macroeconomic variables etc., which lead to an intense competition among other local

and international markets environment (Mbevi & Opuodho, 2022). Companies all over the globe have embarked to review and restructure their investments strategies in order to increase economic growth. Nigeria is not in exception; various economic sectors are persistently experiencing turbulence macroeconomic policy posing a great challenge to their profitability. Among the challenges and risk noted is the higher inflation rate, high tax rates, higher interest rate, higher exchange rate, rising labor costs,

expensive and unreliable source of energy among others (Omotayo, et al., 2020 & Okereke & Ikumariogbe, 2018). Firm performance in the Nigerian manufacturing sector has been deteriorating in recent years compared to the average regional and global productivity levels as indicated in firm's annual reports. Literature reveals that about 20% of manufacturing firms in Nigeria closed their businesses or scale down their production capacity due to poor performance while other firms relocated their operations to other countries; and it is in the dailies news that Mr. president had appealed to the companies proclaiming to leave Nigeria to stay. Some companies have opted to scale down their manufacturing capacity to fit their limits eg Unilever plc, (Nigerian Exchange Group, 2023). This deteriorating performance of the manufacturing sector requires to be monitored strategically and proper action need to be taken to avoid creating major problems in general economy of Nigeria, hence triggered the need for this study.

The metric's uses in measures performance play important role as it facilitates provision of information necessary for decision making and for future strategic plan. Firms' performance is measured using accounting measure. Financial performance statistics

are measured as good tool used in analyzing the well-being of a business in term of financial performance (Mbevi & Opuodho, 2022). The quantitative aspect of financial performance measures are noted to be good as they improve objectivity, consistency and rationality in the estimation of firm's performance. Some of the financial performance metrics used in measuring financial performance includes: Return on Equity (ROE), Return on Asset (ROA), Return on Investment (ROI), Return on Capital Employed (ROCE), Net Profit Margin (NPM) and financial leverage measured as (Equity/Total Assets) are mainly used (Chukwu, et al., 2022).

Investment decisions are argued as the process of sharing resources for major investment or capital expenditures in order to diversify sources of revenue at a point in time. It is a general plan used for the purpose of generating income for an organization, which generally results in acquiring an asset and other resources (Adelino & Robinson, 2017). Investment decisions involve provision of revenue generation sources or a strategy in which an organization sets up or acquires business outside its current products and markets. It involves generating income from many sources. It is the broadening of an area of

research and other scholarly interest in order to help managers and investors make rational investment decisions to enhance sources of revenue, as the main objective of diversification for an organization is to gain an extra market share to ascertain synergistic advantage (Salsabila & Diantimala, 2023).

Previous studies reveal an inconsistency in their findings, some studies that found significant findings includes: (Morwabe & Muturi, 2019; Ringera and Maturi, 2019; Afsar & Karacayir, 2020; Mbevi & Opuodho, 2022; Quddus, et al., 2022; Abdulkareem, et al. 2023) and those that were found to be insignificant includes: (Musau, 2016; Santoso (2019; Sulastri, et al., 2019; Sherine, Wiyanto & Budiono, 2021; Suleiman & Sumani, 2021; Suteja, et al., 2022, Al-Slehat, 2020; Salsabila & Diantimala, 2023). As such findings can hardly be concluded because many were found to significant and many were found to be insignificant. Therefore, the study introduced a moderator as suggested by Baron and Kenny (1986). Abdul-quddus, et al., (2022) suggested that future research should consider the introduction of other macroeconomic variable (interest rate, tax rate) as moderator and interest rate is introduced to moderate the relationship between investment decision and financial

performance of listed consumer goods companies in Nigeria and also to extend the study period to 2022.

2. Literature Review

Financial Performance

The term financial performance is the companies' ability to generate new resources from their daily operations over a given time period and it is measured by profit after tax over total asset (Rajkumar & Hanithar, 2015). Financial performance is the ability of an organization to employ its available resources to increase shareholders wealth and generate sustainable profit to strengthen its capital base through retained earnings to ensure future profitability (Musamba, 2012).

Investment Decision

Investment decision entails diversification and expansion of business activities, new assets acquisition; acquiring existing firms to expand its business through forms of mergers and acquisition strategy; incorporating technology to facilitate transformation of the firm and additional of the long-term assets. However, it includes the trade or renting of assets, variation of marketing strategies, or increase in publicity and promotion have long term impact on

financial performance of the firm (Machuki, 2014).

Interest Rate

Ngugi, (2001) sees interest rate as a cost of capital that predicts the market condition on the future change in the purchasing power of money or potential price rises. It is macroeconomic variable that influence firm's capital structure and its investment decisions, a higher interest rate affect firm financial performance adversely, while low interest rate increase firm profitability.

Empirical Review

Tangible Asset Investment Decision and Financial performance

Salsabila and Diantimala (2023) studied the role of investment decisions and financial performance on tax avoidance of sample 40 out of 97 top Australian, Indian, and Indonesian mining companies mining companies from 2017-2021 using purposive sampling technique. Investment decision was measured by Fixed Asset (tangible asset) Growth, ROA was used to measure firm performance and effective tax rate measured Tax avoidance. Leverage, firm size, firm age and sale growth were used as control variables. Multiple linear regression analysis was employed for data analysis. The results show that both investment

decisions and corporate financial performance affect tax avoidance. Moderately, investment decisions have a significantly positive effect on tax avoidance, and corporate financial performance also has a significantly positive effect on tax avoidance. The results suggest that investment decisions and firm performance motivate managers to tax avoidance. The study fails to show regression pre-estimation test. Mbevi and Opuodho (2022) examine the effect of some selected investment decisions on financial performance of listed manufacturing companies in Kenya from 2015-2019. Descriptive and inferential statistics were applied to analyze the data collected. Correlation and regressions analysis conducted as the analytical tools to enable interpretation of the relationship of the study selected variables. Renewal and expansion decision was used to proxies' investment decision and ROE as dependent variable. The result shows that expansion decision had a negative impact on ROE and renewal decision had positive effect on ROE of listed firms under study.

Al-Slehat (2020) investigates the effect of investment and financial decisions on stock prices and future profits in the presence of financial performance as mediating variable

of listed banking and insurance companies in Jordan from 2009 to 2018. SEM analysis was employed using AMOS 23 software to test the hypotheses. Financial decision shows insignificant effect on future profits and stock prices, whereas investment decision affects future profits and stock prices. Financial performance is considered a mediator in the effect between financing decision and future profits. Conversely, financial performance fails to mediate the impact of financial decision and stock prices. In addition, it cannot mediate the effect of investment decision on future profits and stock prices. Olatunji and Adegbite (2014) examine the impact of fixed asset investments on the profitability of DMB's in Nigeria. They found a significant influence between profitability and fixed asset investments (tangible Asset) of the banking sector in Nigeria. The study of Moon and Sharma (2014) shows a significant relationship between restaurants tangible investment and profitability and liquidity parameters. The study hypothesizes that:

Ho1: Tangible asset investment decision has no significant effect on financial performance of listed consumer goods firms in Nigeria.

Leverage Investment Decision and Financial Performance

Ghardallou (2023) examine firm's financial performance using ROA, Tobin's Q, and ROE, the findings show insignificant effect on firm's leverage from the quintile regression. This indicates that the influence of leverage changed, with higher-profit firms being more negatively affected than low-profit firms. Suleman and Sumani (2021) studied the impact of investment decisions, capital structure, profitability, and company size on the value of the firm, by using samples from the property, real estate, and construction companies listed in Indonesia stock exchange from 2014-2017. The findings showed that the investment decision, capital structure, and profitability show insignificant effect on firm value. Conversely, firm size has a significant negative effect on the firm value. From the results of the F test, investment decision, capital structure, profitability, company size in this study simultaneously influence the value of the firm. Kaluarachchi et al. (2021) investigate the effect of leverage on the performance of Sri Lankan firms. ROA and ROE were employed as financial performance measures. The finding shows a mixed relationship, with both positive and

negative association between leverage and financial performance.

Afsar and Karacayir (2020) investigate the effect of investment and financing decisions on firm value. Productivity and profitability ratio measures investment decisions, leverage and current ratio measures financial decisions and firm measure firm value respectively from 2003-2018. Fixed effects panel data method was employed in analyzing the data. The findings reveal that, asset turnover rate, return on assets, intangible assets, current ratio, stock turnover rate and profit per share variables positively and significantly affect firm value. Leverage ratio, debt turnover rate and crisis variable affect the firm value negatively and significantly. In addition, it was concluded that the effects of the receivable turnover rate and firm size variables on the firm value are insignificant. Danso et al. (2020) investigate the nexus between leverage and firm financial performance of 2403 Indian firms form 1995-2014. The result reveals that the relationship between (Tobin's Q) and financial leverage is negative significant. Lazăr (2016) studied the listed companies of Romanian from 2000 to 2011 to determine the variables affecting the performance of these firms from a resource-based

perspective. The result shows that variables such as tangibles, leverage, size, and labor intensity negatively affect the performance of the companies.

Ho2: Leverage investment decision has no significant effect on financial performance of listed consumer goods firms in Nigeria.

Working Capital Investment Decision and Financial Performance

Abdul-quddus, et al., (2022) studied the moderating influence economic uncertainty on investment decision and firm performance of listed manufacturing sector of Pakistan 2015–2020. GMM estimation was employed for data analysis. The independent and dependent variable were proxies by investment in tangible assets, intangible assets, and financial leverage and firm performance (Tobin's Q) respectively. The study revealed that the moderating impact of uncertainty has significant impact on investment decision in both investment in tangible assets and financial leverage. The finding shows that investment decision and firm performance have negative and significant relationship with economic policy uncertainty. Suteja, et al., (2022) investigate the effect of investment decision and firm value moderating role of corporate social responsibility and profitability of

Non-financial sector firms on the Indonesia Stock Exchange from 2018 to 2020. The fixed effect result showed that there was a negative effect of investment decisions on firm value and the role of CSR and profitability moderate this effect, either when using other control variables or when using a different estimation model. Sherine, et al., (2021) examine the impact of investment decision, funding decision, and profitability on firm value of consumer goods companies in Indonesia Stock Exchange from 2017-2020. The research method used is multiple regression analysis on panel data with a fixed-effect model using the EViews 10.0 software. The findings reveal that all three variables affect the firm value simultaneously, investment decision, funding decision and profitability has a positive and significant effect on the firm value of listed consumer goods companies. Fernández-López et al. (2020) study the investment in working capital and SME's financial performance. The result shows negative relationship between WC on SME's financial performance. The findings of Aytac et al. (2020) also depicted that WC has a significant effect on firm financial performance. Based on the above the following hypothesis is formulated.

Ho3: Working capital investment decision has no significant effect on financial performance of listed consumer goods firms in Nigeria.

Interest Rate and Financial Performance

Oluwayemisi and Samson (2022) investigate the effect of interest rates and the financial performance of listed deposit money banks in Nigeria. Specifically, the study investigated how the growth of domestic money supply, maximum bank lending rate and monetary policy affect financial performance of Nigerian deposit money banks; and how the rate of inflation affects the financial performance of Nigerian deposit money banks. The study's employed both descriptive and ex-post facto design. The findings show that there are positive significant effects between domestic money supply, maximum lending rate; monetary policy rate on financial performance; and inflation has a negative significant effect on financial performance. The study of Bemshima, et al. (2020) found that Interest rates had a significant impact on ROA, but insignificant effect on ROE of listed manufacturing firms in Nigeria. However, concluded that interest rates should be fixed on the value that would be favorably influence financial performance of listed manufacturing firms in Nigeria. Srifitri and

Berliana (2022) their findings show that interest rates have a negatively insignificant effect on investment and funding decisions, but positively moderate effect on dividend decisions of the study firms. The study Al-slehat (2022) on the effect of interest rate risk on financial performance through the banking security degree as a mediating variable in Jordan from 2011-2018. The finding reveals that the banking security degree had influence between interest rate risk and financial performance. The study recommended that policymakers and other stakeholders to provide efficient interest rate risk policies concurrently to support the monetary and financial policies of the banking industry. However, from the above review the study hypothesizes that:

Ho4: Interest rate has no significant moderating effect between investment decision and financial performance of listed consumer goods firms in Nigeria.

2.2.5 Theoretical Reviews

The study is based on two theories resource-based view theory (RBV) and Keynesian theory of investment:

The Resource based view theory was developed by Pfeffer and Salancik (1978). The RBV theory applied cost-effective relationship to explain the strategic investment on resources available to a firm

for development. The theory is of the view that the competitive performance of a firm depends mainly on the firm valuable resources (investment decision). The prospect of the firm depends on the available investment decision on resource allocated during budgeting. To transform a short-run financial performance into a sustainable long run solution, it requires that these resources be varied in nature (eg tangible, leverage working capital investment) and not perfectly mobile. As such, this transforms into valuable organization investment that are neither perfectly limitable nor substitutable at ease (Hoopes, et al 2003). If successful, the firm's bundle of resources could assist the firm sustaining above average returns. The resource-based view suggested that a firm's unique resources and capabilities provide the basis for investment strategy (Hoopes, at al 2003). The investment strategy chosen should allow the firm to best exploits its core competencies relative to opportunities in the external environment

The Keynesian investment theory was developed by Maynard Keynes (1936). It posits that investment is driven by interest rate and Marginal efficiency of capital (MEC) (Arrow, 2017). MEC is the discount rate which could make the present value

from expected returns of a capital asset equal to the price of supply. It is used in placing tasks from the highest viable to the least. The MEC rule is to accept task if MEC is greater than interest rate. Low interest rates attract investments as firms can borrow at low rates since savings will only give low returns (Fuller, 2013). Firms strategic goal of maximizing financial performance; is possible by choosing best investments due to their irreversible nature (Arrow, 2017). Marginal efficiency of capital decrease with the level of investment; this is because most of the tasks or projects with great opportunities are considered first.

3. Research Methodology

The study is based on ex post facto research design because the data is historical in nature extracted from the annual reports and account of firms under study. The population of the study comprise of all (24) listed consumer goods firms in the floor of Nigerian Exchange Group as at 31st December, 2022. The sample was drawn from the population using filtering approach, three filters were applied as: first, firm must be listed in the floor of Nigerian exchange group for the entire period of study; Secondly, the annual reports of the firms must be available and thirdly, the data

required by the study must also be available throughout the period consider in this study. After application of these filters five companies were filtered out and nineteen consumer goods companies that meet the criteria were selected as sample of the study from 2009-2022. Panel multiple regressions were employed for data analysis after employing the assumptions of regression using STATA Version 17.

Research Model

$$ROA_{it} = \alpha + \beta_1 TAS_{it} + \beta_2 WCD_{it} + \beta_3 LEVD_{it} + \beta_4 FSIZE_{it} + \beta_7 AGE_{it} + \mu \dots \dots \dots \text{Equation (I)}$$

$$ROA_{it} = \alpha + \beta_1 INTR_{it} + \beta_2 FSIZ_{it} + \beta_3 FAGE_{it} + \mu \dots \dots \dots \text{Equation (II)}$$

$$ROA_{it} = \alpha + \beta_1 TAS_{it} + \beta_2 WCD_{it} + \beta_3 LEVD_{it} + \beta_4 TAS * INTR_{it} + \beta_5 WCD * INTR_{it} + \beta_6 LEVD * INTR_{it} + \beta_7 FSIZ_{it} + \beta_8 FAGE_{it} + \mu \dots \dots \dots \text{Equation (iii)}$$

The third model above, equation iii, explains the role of interest rate as a moderating variable in the relationship investment decision and firm’s financial performance in this study, based on (Baron & Kenny, 1986).

4. Diagnostics tests

Normality Test

The study adopted the Shapiro Wilk test to find statistical evidence as to whether the data of the study is normally distributed or not. The results of the data normality test of the variables are presented in Table 1 below:

Shapiro–Wilk W test for normal data

Variable	Obs.	W	V	Z	Prob>z
ROA	224	0.28819	117.236		11.024 0.00000
TASSET	224	0.72785	44.823		8.799 0.00000
WCD	224	0.95905	6.744	4.417	0.00001
LEVVD	224	0.95034	8.178	4.863	0.00000
INTR	224	0.80682	31.817	8.006	0.00000
TASSETINTR	224	0.95136	8.011	4.185	0.00000
WCDINTR	224	0.95711	7.063	4.524	0.00000
LEVVDINTR	224	0.95611	7.229	4.577	0.00000
FSIZ	224	0.97491	4.132	3.283	0.00051
FAGE	224	0.95767	6.971	4.493	0.00000

Source: Stata Output, 2023 Version (17)

According to the Shapiro-Wilk (W) test, the null hypothesis is that the dataset is not normally distributed. It is evident from the above table that the data shows the p-value of the entire variables, are significant at 1% level of acceptance. Therefore, the null hypothesis which a state that the data is not normally distributed is hereby rejected.

Heteroskedasticity Test

The heteroskedasticity test was conducted to check whether the variability of the error

term in the regression function is homoscedastic (same variance). The Breusch-Pagans test for heteroskedastic was conducted. The result shows value of Chi² of 841.27 with probabilities of 0.0000, which is significant at 1%, indicating that the data is not homeskedastic. This means the original OLS could not suit the study. Hence, robustness was run and shows that the model can be relied upon for drawing statistical inferences.

Multicollinearity

Variables	Tolerance	VIF
LEVVDINTR	0.182389	5.48
WCD	0.195678	5.11
WCDINTR	0.199387	5.02
TASSETDINTR	0.240132	4.16
LEVVD	0.260388	3.84
INTR	0.307155	3.26
TASSET	0.355075	2.82
FSIZ	0.858876	1.16
FAGE	0.910298	1.10
MEAN VIF	3.55	

Source: Stata output 2023, Version (17)

It can be seen from Table 2 that the variables of the study do not pose a threat to the reliability and validity of the result, showing the absence of a multicollinearity

problem. This is evident from their VIF values being less than 10 and Tolerance Values being greater than 0.1 as a rule of thumb (Gujurati & Portar, 2009).

Descriptive Statistics

Variable	Obs.	Mean	Std. Deviation	Minimum	Maximum
ROA	224	0.0852407	0.476531	-2.359907	6.17431
TASSETD	224	0.4617308	0.2780736	0.0814063	3.191745
WCD	224	0.6827484	0.4101667	0.0726364	1.469333
LEVD	224	0.643619	0.1776092	0.3846714	0.9798336
FSIZ	224	7.655427	0.6015313	6.559118	8.49701
FAGE	224	45.58929	18.818968	12	71

Source: Stata Output 2023, Version (17).

The above table shows the result of descriptive statistic that describe the mean, standard deviation minimum and maximum of the variables used in this study. The average ROA is 0.085 with std. div. of 0.4765, meaning that the data deviate from the mean by 47.65%, indication of no wide range of dispersion between the mean and std. div. As such the mean value shows that the performance of listed consumer goods companies is 8.52%, an indication of large percentage of listed firms under study performance is weak. The companies recorded a minimum of -2.36 and maximum of 6.17. However, the tangible asset has a mean of 0.4617 indications that tangible asset investment decision of firms recorded 46.17% in a particular year with the minimum of 0.0814 and maximum of 3.192. The std. div. recorded of 0.278 an indication of lower level of dispersion between the

mean and std. div. of investment in tangible asset of listed consumer goods companies. The mean value of working capital decision is 0.683 with a std. div. of 0.410 indication of no wide range of dispersion between the mean value and std. div. of working capital decision of listed firms under study; it recorded a minimum 0.073 and a maximum of 1.469. Furthermore, the means value of leverage decision is 0.646 with a std. div. of 0.178 shows a no wide range of dispersion, it recorded a minimum leverage decision of 0.387 and a maximum of 0.979. The mean value of firm size is 7.655 and a std. div. of 0.602, with a minimum value of 6.656 and maximum of 8.497. The descriptive statistics of firm age recorded the mean of 45.589 and a std. div. of 18.820; with a minimum of 12 years and maximum of 72 years on listing of consumer goods companies in Nigeria.

Correlation Matric

	ROA	TASSET	WCD	LEVD	FSIZ	FAGE
ROA	1.0000					
TASSET	0.0016	1.0000				
WCD	-0.0165	-0.4148	1.0000			
LEVD	0.0617	0.2268	-0.5442	1.0000		
FSIZ	-0.0591	-0.1130	0.1439	-0.2421	1.0000	
FAGE	-0.0165	0.0024	0.0065	-0.0808	0.2049	1.0000

Source: Stata Output 2023, Version (17).

The above table presents a correlation matrix, which shows the level and direction of relationship between the dependent variable and independent variables and also among independent variables. The financial performance as measure by (ROA) recorded weak positive relationship with tangible asset of 0.0016, but recorded a negative weak of value of -0.0165 with working capital. However, the leverage decision shows a weak positive relationship with

ROA of 0.0617; but recorded a negative weak relationship of firm size and firm age with ROA with the values of -0.0591 and -0.0165 respectively. The relationship among independent variables recorded weak, moderate and strong positive/negative relationship. Despite these relationships no evidence of multicollinearity exists among the variables as no one exceeded a threshold of 0.8 (Hair, el al., 2010).

Summary of Regression Results

Variable	GLS (Random Effect Unmoderated)				GLS (Random Effect Moderate)			
	Std. Error	coeff.	T-value	P-value	Std. Error	Coeff.	T-value	P-value
Cons.	0.4977	0.2554	0.51	0.608	0.871825	1.4258	1.64	0.102
Tasset	0.1274	0.0163	-0.13	0.898	0.192887	0.1602	-0.83	0.406
Wcd	0.1002	0.0245	0.24	0.807	0.823820	-0.2863	-0.35	0.728
Levd.	0.2206	0.1709	0.78	0.438	1.04656	-1.7245	-1.65	0.099
Intr.	-----	-----	-----	-----	0.024917	-0.0465	-1.86	0.062
Tasstintr	-----	-----	-----	-----	0.201079	-0.1989	-0.99	0.329
Wcdintr	-----	-----	-----	-----	0.062491	0.0217	0.35	0.729
Levdintr.	-----	-----	-----	-----	0.046388	0.0987	2.13	0.033
Fsiz.	0.0563	0.0375	-0.67	0.505	0.057332	-0.0527	-0.92	0.358
Fage	0.0018	0.0005	-0.03	0.979	0.001178	-0.0006	-0.32	0.752

Hausman Specification Test:

Hausman Chi2	= 4.78	=5.63
Prob>Chi2	= 0.4431	=0.7766
Wald Chi2	=1.40	=8.30
Prob>Chi2	= 0.9239	=0.0045
R- Square	= 0.2653	=0.1693

Source: Stata Output 2023, Version (17)

Above table is the summary of the panel data regression results of the model used by the study. The Hausman specification test result of both direct and moderated reveals a Chi2 of 4.78 and 5.63 with respective p-value of chi2 0.4431 and 0.7766 which is not significant at all level of acceptance therefore, the null hypothesis of hausman specification test stated that if null hypothesis is accepted random will be preferred and if the null hypothesis is rejected the fixed effect will be preferred. From the result in the above regression table the null hypothesis is accepted because the p-value of hausman specification tests are not significant at all level of acceptance as such random effect within model was used and it is confirm using lagrangian multiplier test with chi2 of 0.000 and 0.000 the probability of the chi2 1.000 and 1.000 respectively. The R^2 is the multiple coefficients that give the proportion of complete variation in the dependent variable, which is simultaneously explained by the independent variable. From the random effect result, the coefficient of R^2 within of both direct and moderated results of 0.2653 and 0.1693 respectively implies that 26.53% of direct relationship and 16.93% of moderated effect of the complete variation of ROA of listed consumer goods

companies in Nigeria is explained by tangible asset decision, working capital decision, Leverage decision and Interest rate (moderator) while the remaining 73.47% and 83.07% are explain by other factors not captured in this model. However, the result shows the value of the wald chi2 of 8.30 is significant at 5%. This implies that the model fitted the study variables. It further signifies that the selected variables are among the investment decision that influenced the financial performance of listed consumer goods companies in Nigeria.

Test of Hypotheses

In this study, six (6) hypotheses were formulated and tested on the moderating role of interest rate on the relationship between investment decision and financial performance of listed consumer goods firms in Nigeria. However, to reject or accept the null hypothesis at 0.05 (5%) acceptance level, the rejection point is use which states that. (1) If the p value is equal to or less than 5%, the null hypotheses is rejected and the alternate hypotheses is accepted; (2) If the p value is more than 5%, the null hypotheses is accepted and the alternate hypotheses is rejected.

Tangible asset investment decision and Performance of Listed Consumer goods Firms in Nigeria.

The t-test of tangible asset investment decision is -0.83 with p value of 0.406 which is greater than 0.05. Therefore; the null hypothesis one which states that tangible asset investment decision has no significant effect on the financial performance of listed consumer goods firms in Nigeria is hereby accepted.

Working capital investment decision and Performance of Listed Consumer goods Firms in Nigeria.

The t-test of working capital investment decision is negative -0.35 with p value of 0.782 which is greater than 0.05. Therefore; the null hypothesis two which states that working capital investment decision has no significant effect on the performance of listed consumer goods firms in Nigeria is hereby accepted.

Leverage investment decision and financial Performance of Listed Consumer goods Firms in Nigeria.

From the findings the leverage investment decision produces a negative t-test of -1.65 with p value of 0.099 which is greater than 0.05. Therefore; the null hypothesis three which states that leverage investment decision has no significant effect on the

financial performance of listed consumer goods firms in Nigeria is hereby accepted.

Moderating Role of interest rate on the relationship between tangible asset investment decision and Performance of Listed Consumer goods Firms in Nigeria.

The t-test of $t_{asset*intr}$ is -0.99 with p value of 0.329 which is greater than 0.05. Therefore; the null hypothesis four which states that the interest rate does not moderates the relationship between tangible asset investment decision and financial performance of listed consumer goods firms in Nigeria is therefore accepted, because it did not indicate that interest rate strengthen the relationship between tangible asset decision and performance of listed consumer goods firms in Nigeria as t-value increases from -0.83 to -0.99 and the p-value weaken from 0.406 to 0.329.

Moderating Role of interest rate on the relationship between working capital investment decision and Performance of Listed Consumer goods Firms in Nigeria.

The t-test of $wcd*intr$ is 0.35 with p value of 0.729 which is greater than 0.05. Therefore; the null hypothesis five which states that the interest rate does not moderates the relationship between working capital investment decision and financial performance of listed consumer goods firms in Nigeria is therefore accepted. Despite

insignificant relationship from both the direct and moderated result indicate that interest rate increases the relationship between working capital investment decision and performance of listed consumer goods firms in Nigeria as t-value increases from -0.35 to 0.35 and the p-value decreases from 0.782 to 0.729.

Moderating Role of interest rate on the relationship between leverage investment decision and Performance of Listed Consumer goods Firms in Nigeria.

The t-test of $levd*intr.$ is 2.13 with p value of 0.033 which is less than 0.05. Therefore; the null hypothesis six which states that the interest rate does not moderates the relationship between leverage investment decision and financial performance of listed consumer goods firms in Nigeria is hereby rejected, because it proved that interest rate strengthen the relationship between leverage investment decision and financial performance of listed consumer goods firms in Nigeria as t-value increases from -0.1.65 to 2.13 and the p-value reduces from 0.099 to 0.033.

Discussion of Findings

The first objective of this study is to examine the effect of tangible asset investment decision on the financial performance of consumer goods firms in

Nigeria. The result reveals that there is no significant relationship between tangible asset investment decision and the performance of listed consumer goods firms in Nigeria, with the coefficient value of 0.160221 and p value of 0.406 which is greater than 0.05. The positive insignificance relationship, mean a unit increase in investment in tangible asset will not leads to an increase in the performance of consumer goods firm in Nigeria and vice versa. The findings is in line with the study findings of (Suleman & Sumani 2021 & Musau , 2016).

The second objective of this study is to examine the effect of working capital investment decision on the financial performance of consumer goods firms in Nigeria. The result reveals that there is negative insignificant relationship between working capital investment decision and the performance of listed consumer goods firms in Nigeria, with the coefficient value of -0.28637 and p value of 0.782 which is greater than 0.05. The negative insignificance relationship, mean a unit increase in investment on working capital will leads to a decrease in the performance of consumer goods firm in Nigeria and vice versa. The findings is in the same direction

with that of (Sulastri, Hamdan & Hanafi 2019; Salsabila & Diantimala 2023).

The third objective of this study is to examine the effect of leverage investment decision on the financial performance of consumer goods firms in Nigeria. The result reveals that there is negative insignificant relationship between leverage investment decision and the performance of listed consumer goods firms in Nigeria, with the coefficient value of -1.7245 and p value of 0.099 which is greater than 0.05. The negative insignificant relationship, mean a unit increase in investment on leverage will leads to a decrease in the performance of consumer goods firm in Nigeria and vice versa. The findings are in support of (Al-Slehat, 2020; Abdulkareem, et al., 2023)

The fourth objective of this study is to examine the moderating role of interest rate on the relationship between tangible asset investment decision and performance of consumer goods firms in Nigeria. The result reveals that there is weak moderating effect of $t_{asset*intr.}$ and the performance of listed consumer goods firms in Nigeria, with the negative coefficient value of -0.01989 and p value of 0.329 which is greater than 0.05. The t value increases from -0.83 to -0.99 and the p value decreases from 0.406 to 0.329,

this indicated that interest rate weaken the relationship between tangible asset investment decision and the performance of listed consumer goods firms in Nigeria.

The fifth objective of this study is to examine the moderating role of interest rate on the relationship between working capital investment decision and performance of consumer goods firms in Nigeria. The result reveals that there is weak moderating effect of interest rate on working capital investment decision and the performance of listed consumer goods firms in Nigeria, with the positive coefficient value of 0.02166 and p value of 0.729 which is greater than 0.05. The t value increases from -0.35 to 0.35 and the p value decreases from 0.782 to 0.729, this indicated that interest rate strengthens the relationship between working capital investment decision and the performance of listed consumer goods firms in Nigeria.

The sixth objective of this study is to examine the moderating role of interest rate on the relationship between leverage investment decision and performance of consumer goods firms in Nigeria. The result reveals that there is strong moderating effect of interest rate on the relationship between leverage investment decision and the performance of listed consumer goods firms

in Nigeria, with the coefficient value of 0.09867 and p value of 0.033 which is less than 0.05. The t value increases from -1.65 to 2.13 and the p value decreases from 0.099 to 0.033, this indicated that interest rate strengthens the relationship between leverage investment decision and the performance of listed consumer goods firms in Nigeria.

5. Conclusion and Recommendation

The study provides empirical and statistical evidence on the significance of explanatory variables that constitute investment decision in explaining the performance of listed consumer goods firms in Nigeria moderating role macroeconomic variable (interest rate). On one hand, only leverage investment decision moderate by interest rate was found to have positive and significant influence on the firms' performance. This signifies that higher investment in leverage increases the

firm financial performance. On the other hand, the all other variables show both negative/positive insignificant relationships with the firm financial performance of the companies under study respectively, implying that they insignificantly influence investment decision on the financial performance of listed consumer goods firm in Nigeria. However, the moderator has statistically moderated the relationship with other explanatory variables despite insignificant influence on the firm performance compare to direct relationship. Therefore, the managements are recommended optimal investment decision on leverage while making investment decision as it provide higher profit to the companies. Further study can be done using other macroeconomic variables e.g. exchange rate, inflation in other economic sectors.

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Mediating Role of Capital Structure on the Relationship between Corporate Governance and Performance of Consumer Goods Firms in Nigeria

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ABSTRACT

The main objective of this research is to examine the mediating role of capital structure on the relationship between corporate governance and performance of consumer goods firms, Nigeria for the period of 2018-2022. An ex-post facto research design was adopted, all the consumer goods firm listed on the Nigerian Securities and Exchange Commission were censured and filtered through applying criteria, for a company to be part of the sample, it must be listed before 2018 and secondly, the data needed can be identified in the financial statement of such firms. The application of the criteria resulted to the selection of 10 firms as a sample size of the study. The STATA v.14 was adopted to test the hypotheses developed in this study. Based on the findings of the study, corporate governance measures (i.e. board size, director ownership) has significant effect on performance of consumer goods firms in Nigeria. The study also reveals that capital structure has a strong positive effect on the performance of consumer goods firms in Nigeria. The finding of the mediating role of capital structure shows that capital structure partially mediate the relationship between corporate governance (i.e. board size) and performance of consumer goods firms in Nigeria, and fully mediate relationship between corporate governance (i.e. director ownership) and performance of consumer goods firms in Nigeria. The study concludes that the fundamental reason why corporate governance (i.e. board size, director ownership) has impact on the performance (Tobins Q) of listed consumer goods firms in Nigeria is depend on their capital structure.

Keywords: Performance, Capital Structure, Corporate Governance, Board Size.

Introduction

The performance of any firm not only plays the role of increasing the market value of that specific firm but it also leads to the growth of the whole industry which ultimately leads to the overall prosperity of the economy. The subject of financial performance has received significant attention from scholars in the various areas of business and strategic management

(Kwaltommai et al, 2019). It has also been the primary concern of business practitioners in the consumer goods industry since financial performance has implications to organization's health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of a company's resources and

this, in turn, contributes to the country's economy at large (Naser & Mokhtar, 2004).

The possibility of any profit-oriented organization to excel in a competitive market environment depends on its ability to meet up with the immediate demands of its customers, stakeholders and investors (Sani & mamuda, 2020). The continuity of a business set up is determined by its performance in the industry. A well performing business secures its long term achievements effectively and efficiently (Kakanda, Bello & Abba, 2016). Therefore, it is a life wire gauge for evaluating, monitoring managerial and measuring performance of those charged with the responsibility of corporate management, including the overall roles of the board in maintaining the wheel of the entity. Corporate organizations are in dare need of good corporate governance mechanism to drive home its desired goal and objectives (Abolo, 2023).

Corporate governance is needed to align the interest of owners and managers. The key elements of corporate governance are a concern with the enhancement of corporate performance via the supervision or monitoring of management performance and ensuring the accountability of management to shareholders and another stakeholder,

based on the regulatory framework (Arora & Bodhanwala, 2018). Good governance would surely have a significant impact on company performance with strategic decisions and effective monitoring conducted by the board of directors. As owners' interests may be different from representatives' interests, corporate governance can work as a mechanism to align the interests of stakeholders and management. Companies that follow well-defined corporate governance practices are better able to manage effective mechanisms, control oversight, offer more opportunities to flourish, and have better access to resources and hence improve overall performance as well as reduce risks (Bhagat & Bolton 2019). In the corporate system of an organization, corporate financing decisions like capital structure made by board of directors are of crucial importance. Any decisions made by a corporate board can have impact on financial leverage policy (Kijkasiwat, et al., 2022). Capital structure constitutes a substantial part of an organization and therefore, the way in which it is managed will have a significant impact on the profitability of the company concerned. The choice of capital structure is fundamentally an organizational problem. In the case of Nigeria, the capital structure

decision is crucial, as the decision becomes even more difficult in times when the economic environment in which the company operates presents a high degree of instability (like the case of Nigeria). A Firm can issue dozens of distinct securities in countless combination, but the attempts to find the particular combination that maximizes its overall market value is very critical (Brealy & Mayers, 2001) The capital structure to be adopted by a business or organization is a critical decision for the management to make. The decisions are both critical and crucial because of the need to maximize returns to various organizational constituencies and the impact that such decision has on an organization's ability to deal with its competitive environment. It is left to a company to decide to finance its investment either by debt and/or equity. This critical financial decision will have an effect on the debt/equity ratio (debt-equity mix) of the firm. The implication of this debt-equity mix is evident in, but not limited to the shareholders' earnings, cost of capital and the market value of the firm (Usman, 2019).

In addition, some researches suggest that corporate governance has a significant effect on financial performance (Vu et al. 2018; Dobija et al. 2022; Guney et al. 2020;

Mohsni et al. 2021; Ozdemir 2020; Abolo, 2023; Lawal, et al., 2022; Tariq & Naveed 2016; Ganguli and Guha 2021) but to improve the explanatory power of this model, the study introduces capital structure as a mediating variable since some literatures shows that capital structure affect firms financial performance (Al-Najjar, & Clark, 2017; Farooq, et al., 2017; Fosu, et al., 2016; Bokpin, 2009; Bhagat, & Bolton, 2008) and corporate governance affect capital structures of organizations (Le & Tannous, 2016; Bokpin & Arko, 2009; Iqbal and Javed, 2017). This study seeks to improve upon the other scholars by introducing capital structure as mediating variable in the relationship between corporate governance and firm's financial performance. The study provides insights and directions for firms that have interest in competing at the open market to channel all their efforts and resources towards areas that would improve their performance.

2.0 Review of Related Literatures

2.1 The Concept Financial Performance

Financial performance shows how well a company uses its resources to meet the needs of its investors and other stakeholders (Man & Wong, 2013). Firm's financial performance can be defined as a process by which company manages its resources in

line with its operational strategies and objectives to develop competitive advantage. To Ibrahim and Abdullahi (2019), financial performance is the ability of a firm to maximize its cost of operations, efficiently use its assets and maximize the value of shareholders. It shows the effectiveness and efficiency of management in the use of corporate resources. They further stress that it is an attempt by a firm to meet established goals or effective productivity, measure of its earnings, profits and appreciation in value which is disclosed by the rise in the market value of shares. However, how well a company can profit from its primary business activity is a gauge of its financial performance (Gofwan, 2022). Firm's performance can be seen as a broad indicator of its overall financial health from which Trade creditors, bondholders, investors, employees, and management are all stakeholders interested in the business. All of these stakeholders keep an eye on the company's bottom line. Corporate performance measure has different aspects and choosing relevant measures are important for pursuing research intentions. Performance measurements offer insights into appropriate measures for answering research questions (Haniffa & Hudaib, 2006). There are various measures which

have been captured by other studies as a measure for firm performance (e.g., value ratio, labour productivity, net present value, market-to-book value, and earnings per share). The number of units sold could also be used (Griffin & Mahajan, 2019). Since the study aims at finding the mediating effect of capital structure on the relationship between corporate governance and firm's financial performance, Tobin's Q is the most suitable measure of performance for the study as it provides a basis for measuring the firm's investment efficiency, capital allocation and market value. Tobin's Q is the book value of long-term debt and market value of the equity divided by the book value of the total asset.

2.2 Concept of Corporate Governance

Scholars define corporate governance in different ways. Jensen and Meckling (1976) define it as the system by which companies are directed and controlled. While Shleifer and Vishny (1997), on the other hand, stresses on the importance of corporate governance in addressing agency problems between shareholders and managers. And to Tirole (2001), Imhoff (2003), OECD (2004), Keasey et al. (2005), and CBN Codes (2003, 2006) among others, corporate governance encompasses the controls and procedures that exist to ensure that management acts in

the best interest of all the stakeholders, in order to maximize the value of the firm. It also consists of the whole set of legal, cultural, and institutional arrangements that determine what publicly traded corporations can do, who controls them, how that control is exercised, and how the risks and returns from the activities they undertake are allocated. Corporate board size has the power to make, or at least, ratify all important decisions including decisions about investment policy, management compensation policy, and board governance itself. It is also plausible that board members with appropriate stock ownership will have the incentive to provide effective monitoring and oversight of important corporate decisions noted above; hence board size and board ownership can be a good proxy for overall good governance (Bhagat and Bolton, 2008). Furthermore, the measurement error in measuring board size and board stock ownership can be less than the total measurement error in measuring a multitude of board processes, compensation structure, and charter provisions (Bhagat and Bolton, 2019).

2.2.1 Board Size

Board of directors is one of the most important elements of corporate governance mechanism in overseeing the conduct of the

company's business. Board size is defined as the number of directors in the company's board of directors. There are few arguments on whether the larger board performs more than the smaller board size. In the extant literature, agency theorists like Linck et al. (2008), and Lehn et al. (2009), argue that larger boards are more effective in monitoring and advising management because of their ability to collect and process more information than smaller boards. This makes them more effective in checkmating the self-serving behaviour of managers. Others like Jensen (1993) argue that large board sizes can become too clumsy and inefficient. He suggests that board sizes greater than seven or eight directors are less effective and more susceptible to CEO control than smaller boards.

2.2.2 Directors Stock Ownership

The ownership of the board shows that the group of individuals that own the company. There are various types of ownership and all have an impact on how the organization is run. Directors may also be owners as an incentive for them to act in the interests of the shareholders (Goel 2018); as the assumption is that when the directors' interests are aligned with those of the shareholders then they would want to

maximize their wealth too (Mahn-Chien et al 2018). This can also encompass other key members of the organization like auditors to form institutional ownership. According to agency theory, directors are opportunistic unless they have proper incentive (Abdallah and Ismail, 2017; Kumar and Zattoni, 2016), so managerial ownership is important as it acts as an incentive mechanism. The alignment theory argues that to the extent that managers hold shares in their firm, the interests of the shareholders is better served (Jensen and Meckling, 1976).

2.3 Concept of Capital Structure

The capital structure of a firm refers to the arrangement of various financial resources used to finance their operations and capital expenditure (Dahiru & Dogarawa 2021). In financial terms, it refers to the method a company selects to use to finance its assets using a suitable ratio of debt to equity. In the financial statements of business firms, it serves to illustrate the proportionate relationship between debt and equity (Bello et al. 2020). Any of the following formats can be used to define the debt-equity mix: Three options are available: 100% equity: 0% debt (unlevered firm), 0% equity: 100% debt (highly levered), and $X\%$ equity: $Y\%$ debt (capital mix). In order to reduce the cost of capital to a business, capital structure

must be used effectively by preventing the business from taking on more debt than it can handle; carefully thought-out capital structure lowers the risk of insolvency (Opoku-Asante 2022). Three capital structure proxies, including the debt-to-equity ratio, the short-term debt to total assets ratio, and the long-term debt to total assets ratio, were identified by Bello et al. (2020). A leverage ratio called the short-term debt to total assets ratio shows how percent of a company's total assets are financed by short-term debt with a one-year or shorter maturity period. The amount of a company's assets that must be sold off in order to satisfy immediate obligations is also determined by its leverage ratio. According to Meyers and Majluf (1984), businesses that use short-term debt are likely to have greater prospects for growth in their investment opportunities. Utilizing short term indebtedness expands the pool of available external capital and encourages improved business financial performance (Seid 2017). To illustrate how much of a company's assets are financed by long-term debts like long-term loans, bonds, and other securities, the long-term debt to total assets ratio is a leverage ratio. It illustrates the amount of assets that would need to be liquidated in order to pay off long-term

debts. Additionally, the debt to equity ratio is a leverage ratio that assesses how much a company owns vs how much it owes. It evaluates a company's overall debt in relation to the capital that the owners initially contributed and the profits that have been held through time.

2.4.1 Board Size and Financial Performance

The agency theory provides a link between board size and the financial performance of firms (Rashid 2018; Shen et al. 2022). Accordingly, the theory proposes that the board as an agent of owners should provide oversight of management, but that this oversight should correspond appropriately with the size and mixture of the board. A membership of five to nine have been suggested as appropriate (Malik et al. 2021; Guney et al. 2020). Hsu and Yang (2022), note that the board size helps in reducing financial loss in firm output. Uyar et al. (2020), observe that no significant evidence supports the notion that board size has a positive effect on the financial performance of firms. Tseng et al. (2020); Hsu and Yang (2022); Kijkasiwat, et al., (2023), note that the impact of board size on financial performance is at best mixed, stressing that it can only be positive from a corporate social responsibility perspective. Ghosh and

Ansari (2018), note that board size does not affect the performance of Indian cooperative banks. Vu et al. (2018), Dobija et al. (2022), Guney et al. (2020), and Mohsni et al. (2021), have noted that board size has a significant positive impact on ROA, but has no impact on ROE. Ozdemir (2020), has notes that the impact of board size on the financial performance of the US tourism sector is only positively related to Tobin's q. Abolo, (2023); Lawal, et al., (2022), results shows a negative significant relationship between board size and ROE. This leads to the development of the following hypothesis:

H1. Board size has significant effect on financial performance.

2.4.2 Directors Stock Ownership and Financial Performance

Ganguli and Guha (2021) explore the impact of board ownership concentration among other variables on the financial performance of different industries in India. The study employs various methods for analysis including the OLS models and the SLS methods. It reveals that very low ownership board concentration had a negative impact on the financial performance of the organization and that the ideal ownership concentration is between 25% and 75%. It also reveals that board size is positively

associated with increased financial performance, but board independence has the opposite effect.

Tariq and Naveed (2016), seek to determine ownership structure impact on financial performance of Pakistani companies in the textile industry. OLS regression analysis is employed on a period of 6 years. The Economic Added Value method was used to measure financial performance. Familial ownership was found to have positive albeit insignificant association with financial performance. However, government and institutional ownership result in worse and decreased financial performance respectively.

H2. Director's stock ownership has significant effect on financial performance.

2.4.3 Capital Structure and Financial Performance

Following a review of the literature on the relationship between capital structure (CS) and financial performance, some authors i.e., Oyakhire (2019) Garba and Inusa (2017), Dahiru and Dogarawa (2021), Bello et al. (2020) found a positive correlation between capital structure and financial performance, while others Osuji and Odita (2022), Bashiru and Bukar (2021), Olajide and Funmi (2018), and Opoku-Asante (2022) maintained a negative correlation.

Some researchers have also suggested that CS has complemented governance mechanisms in mitigating agency conflicts (Cuomo et al., 2016; Hussainey, & Aljifri, 2012). Hence, many researchers have recommended exploring whether there is a complementary association between CS, CG, and firm performance (Bhatt, & Bhatt, 2017; Detthamrong, & Chancharat, 2017, Dimitropoulos, 2014). This recommendation has arisen because CS as a third variable can be considered a discipline mechanism (Muhammad, et al., 2021; Serrano, & Dimitropoulos, 2017) and is thus expected to have a positive impact on the relationship between CG and firm performance (Al-Najjar, & Clark, 2017; Farooq, et al., 2017; Fosu, et al., 2016; Bokpin, 2009; Bhagat, & Bolton, 2008).

H3. Capital structure has significant effect on financial performance.

H4: Capital structure mediates the relationship between board size and financial performance.

H5. Capital structure mediates the relationship between Director's stock ownership and financial performance.

2.4.4 Corporate Governance and Capital Structure

Berger et al. (1997), find that when the board of directors is larger, leverage is

lower. Heng, Azrbaijani, and San (2012), study Malaysian companies and find that companies with larger boards could enhance their performance by driving the management to reduce the firm's debt financing. Moreover, Ranti (2013) discovers that there is a significant negative relationship between both of them, and concludes that firms with a smaller board size tend to have greater leverage, which they can use to reduce their agency problems. This is because a firm with a larger board strictly monitors and controls the management team.

Wellalage, Locke, and Acharya (2018) averse that managerial ownership negatively affects the debt of New Zealand firms. Moreover, Ruan, Tian, and Ma (2011); Wahba, (2014) realizes that there is a negative relationship when the CEO's proportion of ownership is either lower than 18% or over 46%, and the debt level increases as the percentage of ownership increases in the Chinese market. Conversely, Berger et al. (1997), report that a relationship between both of them is significantly positive. They state that managers with financial incentives are more closely aligned with outside shareholders and will pursue a more levered capital structure to increase the value of the firm.

Moreover, Shoaib and Yasushi (2015), report that when CEO ownership level is at a low level in Pakistan, it has a positive impact on firm leverage. In addition to these, Le and Tannous (2016) and Bokpin and Arko (2009), find that the managerial shareholding has a significant positive effect on the debt ratio. Iqbal and Javed (2017), examine the moderating role of CG in the association between CS and FP, using firms listed in the Karachi Stock Exchange and find that CG positively moderates the relationship between CS and FP.

H6: Board size has a significant effect on capital structure.

H7. Director's stock ownership has significant effect on capital structure

2.5 Theoretical Review

2.5.1 Stewardship Theory

Contrary to Agency, Resource Dependence and Signaling Theories that place emphasis on managerial opportunism and monitoring stewardship theory posits that executive managers are intrinsically trustworthy individuals (Nicholson & Geoffrey, 2003). Subsequently, managers should be fully empowered to run firms because they are good stewards of the resources entrusted to them (Letza et al., 2004). Furthermore, stewardship theory makes several assumptions about the behaviour of senior

managers. Firstly, it assumes that since top managers usually spend their entire working lives in the company they govern; they are more likely to understand the businesses better than outside directors and so can make superior decisions (Donaldson & Preston, 1995; Donaldson & Davis, 1991).

Secondly, executive managers possess superior formal and informal information and knowledge about the firm they manage, which can aid better decision-making (Donaldson & Davis, 1991). Finally, competitive internal and external market discipline and the fear of damaging their future managerial capital ensure that agency costs are minimized (e.g., Fama, 1981; Fama & Jensen, 1983). As a result, proponents of stewardship theory contend that better financial performance are likely to be associated with internal corporate governance practices that grant managers greater powers, such as combining the positions of company chairman and CEO (Farhat, 2014; Nicholson & Geoffrey, 2003; Donaldson & Davis, 1991). It is against this and considering the multidimensional nature of CG impact on firm performance that this study adopts in contrast, stewardship theory that suggests that, due to agents (stewards/managers) information and knowledge advantages over shareholders, better

financial performance is likely to be associated with greater managerial trust and powers.

Trade off Theory

Modigliani and Miller (1958), develop the trade-off theory. The trade-off theory of capital structure suggests how the optimal level of debt and equity in the company's capital structure is chosen to derive maximum benefits from the tax shield as the interest expense is considered as tax-deductible expense (Kraus & Litzenberger, 1973). In addition, it is also helpful in choosing the best financing level of debt and equity that will save the organization from financial troubles (Peizhi & Ramzan, 2020). According to Thakolwiroj, 2021, the more a firm uses debt financing, the more it increases its firm value. Consequently, the optimization of the capital structure should consider the cost and benefit analysis because the cost of debt is a lower cost than the cost of equity. Kraus and Litzenberger (1973), view that firms with heavy debt financing will make more tax savings but on the other hand, the firm value will decrease when a firm confronts the costs of financial distress.

3.0 Methodology

This study adopts ex-post facto design. The population consists of all the 22 consumer

goods firms listed on the Nigerian Stock Exchange as at the year 2022. The study adopts filtering criteria to select the sample size by applying two criteria; first, the company must be listed before 2018 and secondly, the data needed can be identified in the financial statement of such firms. Based on the criteria, 10 firms were selected as the sample size of the study. The study uses secondary data which are extracted from the annual reports of consumer goods firms listed on the Nigerian Stock Exchange for the period of five years from 2018 to

2022. The dependent variable financial performance is measured using Tobin's q and the independent variable is corporate governance was measured by board size and directors stock ownership. The mediating variable is capital structure. For the purpose of the presentation and discussion of the result of data generated in the course of these research, descriptive statistics, correlation and regression techniques of data analysis was used in STATA version 14th statistical tools of analysis.

Model Specification

$$FP_{it} = \beta_{0it} + \beta_1 BS_{it} + \beta_2 DO_{it} + \beta_3 Age_{it} + \beta_4 Size_{it} + e_{it}.$$

$$FP_{it} = \beta_{0it} + \beta_5 CS_{it} + \beta_3 Age_{it} + \beta_4 Size_{it} + e_{it}.$$

$$CS_{it} = \beta_{0it} + \beta_1 BS_{it} + \beta_2 DO_{it} + \beta_3 Age_{it} + \beta_4 Size_{it} + e_{it}.$$

$$M_{it} = \beta_{0it} + \beta_1 BS + \beta_2 DO_{it} + \beta_5 CS_{it} + \beta_3 Age_{it} + \beta_4 Size_{it} + e_{it}.$$

$$FP_{it} = \beta_{0it} + \beta_6 M_{it} + e_{it}.$$

$$FP_{it} = \beta_{0it} + \beta_1 BS + \beta_2 DO_{it} + \beta_5 CS_{it} + \beta_6 M_{it} + \beta_3 Age_{it} + \beta_4 Size_{it} + e_{it}.$$

Where:

FP_{it} = Tobin's Q (long-term debt and market value of the equity divided by total asset).

BS_{it} = Board Size (The total number of board members at the end of the fiscal year).

DO_{it} = Directors stock ownership (total number of shares owned by directors).

CS = Capital Structure (Long-term Debt to Total Assets Ratio).

Age_{it} = Age (Measure by counting from year of listing to the periods covered).

$FSize_{it}$ = Firm Size (Measure by natural log. of Total assets).

M_{it} = Mediating effect of capital structure on corporate governance and financial performance.

β_0 = Constant (i.e., the intercept).

$\beta_1 - \beta_6$ = Coefficient of the explanatory variables (i.e., the slope).

e = Error term.

i = Individual firm.

t = Time period (i.e., year).

4.0 Discussion of Results

This section discusses the results of the data collected.

4.1 Descriptive Statistics.

Table 1: Descriptive Statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
FP	50	-0.145	2.721	2.317	0.297
BS	50	6.000	14.000	9.550	3.440
DO	50	0.152	0.370	0.251	0.263
CS	50	0.013	0.175	0.220	0.231
Age	50	1.000	50.00	18.285	12.151
FSize	50	8.112	9.695	8.958	0.496

Source: Author Research Data Analysis (2024).

Table 1 above reveals that Tobins Q has a mean of 2.317, a standard deviation of 0.297. BS mean value (9.00) shows that on the average, the sampled firm have (9.00) board members, therefore, fulfill the corporate governance code rules. DO have a minimum value of 0.152 and a maximum of 0.370, and has a standard deviation of 0.263 which is greater than the mean (0.251) this indicates a faster growth rate during the

period of this study. CS has a minimum value of 0.013 and a maximum of 0.175, and has a standard deviation of 0.231 which is greater than the mean (0.220) this indicates a faster growth rate in the process of study. The table also reveals that consumer goods firms' age which is a control variable ranged between 1 to 50 years, and size (the second control variable) is 8.95% on the average during the period of the study.

4.2 Diagnostics Testing

4.2.1. Heteroskedasticity Tests

Table 2: Heteroskedasticity Tests

	Chi ²	p-value
Breusch-Pagan	51.45	0.475
Ho: (Null)		Accept

Source: Authors Research Data Analysis (2024).

The result in table 3, shows that p-value of the chi-square 52.34 for the FP model was 0.405 which greater than 0.01 (1%), this also

indicates that there is no existence of Heteroskedasticity on residuals of the model.

4.2.2. Normality Test

Table 3: Tests of Normality

	Skewness		Kurtosis	
	Statistics	Std. Error	Statistics	Std. Error
FP	.672	.168	.858	.334
BS	.191	.168	.644	.334
DO	.347	.168	.583	.334
CS	.945	.168	.374	.334
AGE	.225	.168	.913	.334
FSize	.928	.168	.145	.334

Source: Authors Research Data Analysis (2024).

Table 3 shows that all skewness and kurtosis values for the variables were found within the levels determined according to the research results. Therefore, the data are considered to be distributed with a high approximation to normal (Hair et al., 2010).

4.3 Correlation Analysis

The study considers correlation important in detecting the strength and direction of relationship between the study variables, the

values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative), the absolute value of the correlation coefficient indicates the strength, with larger values indicating stronger relationships.

Table 4: Correlation Result

	FP	DO	BS	CS	AGE	SIZE	VIF	Tolerance
FP	1						-	-
DO	0.429	1					1.32	0.784
BS	0.517	0.464	1				1.11	0.900
CS	0.381	0.199	0.233	1			4.04	0.247
AGE	0.552	0.110	0.372	0.256	1		1.50	0.666
SIZE	0.468	0.131	0.401	0.633	0.701	1	3.79	0.264

Source: Authors Research Data Analysis (2024).

Table 4 shows the correlation analysis of the dependent variables: FP (Tobins Q), the independent variable: DO and BS, and mediating variable: CS and the control variables: AGE and SIZE. The relationship between FP and DO is positive and large,

with a coefficient of 0.429, this means that, all things being equal the higher the DO the higher the FP. The relationship between FP and BS is positive and large, with a coefficient of 0.517, this means that, all things being equal the higher the BS the

higher the FP. The relationship between FP and CS is positive but medium, with a coefficient of 0.381, this means that, all things being equal the higher the CS the higher the FP. The table also indicates that the variance inflation factor (VIF) is less than 10 and tolerance is greater than 0.1. Myers (1990) suggests that a variance inflation factor (VIF) value greater than 10 calls for concern, however, for this study, the VIF values are less than 10.

4.4 Regression Analysis

This study attempts to answer the question thus: to what extent does capital structure mediate the relationship between corporate governance and firm performance? This

paper presents the empirical results. Model 1 test the relationship between corporate governance variables (BS and DO) and firm performance, all dimensions of corporate governance regress with firm performance. Model 2 test the relationship between corporate governance variables (BS and DO) and capital structure (CS), all dimension of corporate governance regress with capital structure. Model 3 shows regressed dependent variable firm performance and capital structure. Model 4 shows regressed mediating role of capital structure on the relationship between corporate governance and firm performance.

Table 5: Regression Models

Variables	Model 1	Model 2	Model 3	Model 4
BS	0.000*** (3.78)	0.009*** (2.61)	-	0.047** (1.99)
DO	0.002*** (3.17)	0.022** (2.29)	-	0.073* (1.79)
AGE	0.675 (0.42)	0.592 (0.54)	0.641 (0.47)	0.056* (1.91)
FSize	0.047** (1.99)	0.016** (2.42)	0.015** (2.44)	0.014** (2.46)
CS	-	-	0.001*** (3.23)	-
Cons	0.008** (1.168)	0.075* (.7329)	0.016** (2.42)	0.041** (2.05)
No of obs	50	50	50	50
R-squared	0.496	0.461	0.358	0.525
F-Statistics	37.264 ***	36.345 ***	33.42***	37.95***
Wald Chi ² Statistics	352.16***	349.23***	332.28***	361.85***
Root MSE	.43145	.36671	.33919	.49211

Note: ***, **, * denotes 1%, 5%, and 10% level of significance.

Source: Authors Research Data Analysis (2024).

Table 5 above indicates that the F statistics and Wald chi² of model 1, 2, 3 and 4 are all significant at 1%, showing that the models are fit for the study. The overall R² of model 1, 3 and 4 revealed that 49.6%, 35.8% and 52.5% of change in performance of consumer goods firms in Nigeria is explained by the explanatory variables used in the model 1, 3 and 4 respectively, and 46.1% of change in capital structure of consumer goods firms in Nigeria is explained by the explanatory variables used in the model 2 of the study. The results indicated that board size (BS) $p < 0.05$ has positive and significant impact on firm performance and director ownership (DO) $p < 0.05$ has positive and significant impact on firm performance. Similarly, the results also shows that board size (BS) $p < 0.05$ has positive and significant impact on capital structure and director ownership (DO) $p < 0.05$ has positive and significant impact on capital structure. It also indicated that capital structure (CS) $p < 0.05$ have statistically significant influence on the performance of consumer goods firms in Nigeria.

Meanwhile, Baron and Kenny's (1986), methods is used to test the mediation effect of capital structure with corporate governance and firm performance. If the relationship between the corporate

governance and firm performance becomes insignificant in equation (4) after entering the capital structure said to be the full mediation. Capital structure partially mediates the relationship between the corporate governance and firm performance when equation (4) weaker than equation (1). Table 5 results describe that the board size (BS) having positive correlation with performance, and with capital structure (CS) positive correlation, but after entering the capital structure, the $p < 0.05$ ($p=0.047$) which represent that there is partially mediation with board size and firm performance. Director ownership (DO) relationship with firm performance is positive and significant and with capital structure (CS) the relationship is also positive and significant, but after entering the capital structure as a mediating variable, the $p > 0.05$ ($p=0.073$) which represent that capital structure full mediation with director ownership and firm performance.

4.4.2 Test of Research Hypotheses and Discussion of Findings

The findings indicate that there is significant relationship between board size and firm performance (Tobins Q); therefore, the null hypothesis one which states that board size has no significant effect on the performance (Tobins Q) of listed consumer goods firms

in Nigeria is hereby rejected. The findings are in line with Kijkasiwat, Hussain, and Mumtaz, (2023), Huynh, Hoque, Susanto, Watto, and Ashraf, (2022) and in contrary with Abolo, (2023). There is significant relationship between director ownership and firm performance (Tobins Q); therefore, the null hypothesis number 2, which states that director ownership has no significant effect on the performance (Tobins Q) of listed consumer goods firms in Nigeria, is hereby rejected. The findings are in line with that of Ghosh and Ansari (2018) and Vu et al. (2018) and in contrary with the study of Hsu and Yang (2022) and Tseng et al. (2020).

This study also shows that there is significant relationship between board size and capital structure; therefore, the null hypothesis three which states that board size has no significant effect on the capital structure of listed consumer goods firms in Nigeria is hereby rejected. The findings is in line with Vu et al. (2018), Dobija et al. (2022), Guney et al. (2020), and Mohsni et al. (2021), and in contrary with the Uyar et al. (2020). There is significant relationship between director ownership and capital structure; therefore, the null hypothesis 4 which states that director ownership has no significant effect on the capital structure of listed consumer goods firms in Nigeria is

hereby rejected. The findings are in line with that of Tariq and Naveed (2016), and in contrary with the study of Ganguli and Guha (2021). There is significant relationship between capital structure and firm performance (Tobins Q); therefore, the null hypothesis five which states that capital structure has no significant effect on the performance (Tobins Q) of listed consumer goods firms in Nigeria is hereby rejected. The findings is in line with that of Oyakhire (2019), Garba and Inusa (2017), Dahiru and Dogarawa (2021), Bello et al. (2020), and in contrary with the study of Osuji and Odita (2022), Bashiru and Bukar (2021), Olajide and Funmi (2018), and Opoku-Asante (2022).

Meanwhile, the results indicates that capital structure partially mediate the relationship between board size and firm performance (Tobins Q); therefore, the null hypothesis six which states that capital structure doesn't mediate the relationship between board size and performance (Tobins Q) of listed consumer goods firms in Nigeria is hereby rejected. The results also show that capital structure fully mediate the relationship between director ownership and firm performance (Tobins Q); therefore, the null hypothesis seven which states that capital structure doesn't mediate the relationship

between director ownership and performance (Tobins Q) of listed consumer goods firms in Nigeria is hereby rejected. These results suggest that the fundamental reason why corporate governance (i.e. board size, director ownership) has impact on the performance (Tobins Q) of listed consumer goods firms in Nigeria is depend on their capital structure.

5.0 Conclusion and Recommendation

The study investigated the mediating effects of capital structure on the relationship between corporate governance and performance of consumer goods firms in Nigeria. Based on the findings, corporate governance measures, (i.e. board size, director ownership) have significant effect on performance of consumer goods firms in Nigeria. The study also reveals that capital structure has a strong positive effect on the performance of consumer goods firms in Nigeria. The finding of the mediating role of capital structure shows that capital structure partially mediate the relationship between corporate governance (i.e. board size) and performance of consumer goods firms in

Nigeria, and fully mediate relationship between corporate governance (i.e. director ownership) and performance of consumer goods firms in Nigeria. The study concludes that the fundamental reason why corporate governance (i.e. board size, director ownership) has impact on the performance (Tobins Q) of listed consumer goods firms in Nigeria is depend on their capital structure. These results are robust to alternative econometric specifications and variable definitions. This study utilizes certain firm-specific characteristics to represent the CS to assess its role as a mediating variable in the relationship between CG (i.e. board size, director ownership) and firm performance. This study makes a contribution to the literature by showing that CS mediates the relationship between CG and firm performance. It is therefore, recommended that manager of consumer goods firms in Nigeria should consider the optimal mixed of corporate governance mechanisms (i.e. board size, director ownership) and capital structure as it proved that capital structure mediate the relationship.

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