



BAYERO BUSINESS REVIEW

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

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

**NOVEMBER 2022
VOL. 6, NO. 2**

ISSN: 0189-4684

BAYERO BUSINESS REVIEW

**A Journal of the Department of Business
Administration and Entrepreneurship, Faculty of
Management Sciences, Bayero University, Kano,
Nigeria**

**November, 2022
Volume 6, No. 2**

BAYERO BUSINESS REVIEW

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Published by the Department of Business Administration and Entrepreneurship, Bayero University, New Campus Gwarzo Road, P.M.B, 3011
Kano, Nigeria

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November, 2022

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ISSN: 0189-4648

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The articles to be submitted should have an abstract of not more than 150 words. It should contain the main aim of the study, its relevance, the methodology use, the major finding and a highlight for publication and/or recommendations.

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- ii) Introduction
- iii) Literature review (conceptual and empirical) and Conceptual/theoretical framework
- iv) Methodology
- v) Results and discussions
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Bayero Business Review

<http://bayerobizrev.ng/>

Published By:

The Department of Business Administration and Entrepreneurship,
Bayero University, Kano Nigeria
P.M.B. 3011

November, 2022

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Editor's Note

The Editorial Board of Bayero Business Review (BBR) is excited once more to present to you volume 6, number 2 of the Journal which is published by the Department of Business Administration and Entrepreneurship, Bayero University, Kano. BBR provides a platform for academics, policy makers and industrialists to extend the frontier of knowledge with regards to theory and practice in Management. To this end, the Journal publishes (bi-annually) original scholarly research underlined with sound academic prowess. The Journal's high quality is ensured by the efforts of our able members of the Editorial Board and also the critical paper reviewers.

Furthermore, we are glad to inform you that the journal has established an online presence through a formidable website that is user friendly (<http://bayerobizrev.ng/>). Again the online presence ensures wide access to the journal in line with global best practice. The journal is still working on the indexing in various global databases.

Again, the Editorial Board is further delighted by the overwhelming response and submissions of manuscripts throughout the country and across different areas of Management. Thus, the Board appreciates the quality and academic excellence of the submissions.

Finally, on behalf of the Board of BBR, I sincerely appreciate the support and contributions of everyone who helped in a way to seeing the success of our great journal. Finally, we thank Allah in whose mercy good things are being accomplished.

Associate Prof. Ahmad Audu Maiyaki
Editor-in-Chief
Bayero University, Kano

Competitive Advantage and Performance of Furniture Manufacturing Businesses in Maiduguri Metropolis, Nigeria

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ABSTRACT

The 21st business environment is portrayed by significant degrees of rivalry, dynamism and technological sophistication. This is extremely difficult for Small Scale Business Owners/Managers since they must plan and implement methods to attain and sustain greater performance. Consequently, competitive advantage plays an important role as businesses aim at gaining high performance. This study examined competitive advantage and performance of furniture manufacturing businesses in Maiduguri Metropolis, Nigeria. Survey research design was adopted, data was collected with aid of structured questionnaire. A total of 229 questionnaires were distributed to owners/managers of furniture manufacturing businesses in Maiduguri Metropolis. Out of this number, 211 were correctly filled and retrieved. The data collected was analysed using General Least Square with the aid of Statistical Package for Social Science (SPSS) version 23. The finding of this study showed that there is a significant positive effect of cost leadership and market focus on performance of furniture manufacturers in Maiduguri Metropolis. The study concluded that competitive advantage positively improves the performance of furniture manufacturers in Maiduguri metropolis. Therefore, the study recommended that furniture manufacturers should adopt competitive strategy to boost their performance.

KEYWORDS: Performance of SSBs, Cost Leadership, Market Focus, SSBs.

1. Introduction

Generally speaking, there seems to be no accepted definition of the term Small Scale Business (SSB) as the concept varies from country to country, industry to industry and from one financial institution to another. According to Aminu (2017), Small Scale Business is any business enterprise that is established to take any activity whose total investment is not more than N30 million excluding cost of land; that has a work force not more than 50 full time workers and turns of N2 Million. Similarly, Small Scale

Business is described by James (2015) as an enterprise whose total cost, comprising working capital but excluding cost of land, does not fall below one million Naira and does not exceed forty million Naira, with 11 to 35 employees. In general, SSB is an enterprise in which the owner of the business influences the whole decision-making process in the business and has low capital requirement for its operation. In SSB operation, the manager performs all the functions of management alone (James, 2015).

The performance of Small Scale Business (SSB) is generating huge arguments among researchers, practitioners, educationalists and policy makers because the characteristics and bases of SSB performance have always been points of discussion and importance. SSB have experienced poor performance ranging from low market growth, poor sales which resulted from low performance (Olubiya, Egwakhe & Egwuonw, 2019). As a result of unique constraints and limitations faced by SSB such as lack of strategic management, insufficient financial resources, poor educational background, inadequate managerial expertise, among other limiting factors, efforts are constantly being made to understand how the SSBs performance can be boosted (Akinso, 2018). Achieving superior performance requires that Small Scale businesses (SSB) should have some strategic stances that aggressively give them a hold in the industry they operate. Pulka, Ramli & Bukar (2018) proposed that when performance is improved, SSBs gain high profit, encouraging financial outcomes, high quality products/services, gaining more market growth and surviving for an extended term using relevant strategies. Consequently, this results in competitive advantage for the SSB.

Competitive Advantage is a basic concept in the field of strategic management that

provides an understanding of what accounts for differences in performance among businesses (Amit & Zott, 2008; Ceccagnoli, 2009). This phenomenon was introduced by Porter in 1985. He believed that a company's competitive advantage stems from its capacity to provide superior value to its clients, which can be achieved by giving lower pricing than competitors for similar/equivalent services or by providing distinctive benefits that mostly compensate for a higher price. Porter (1985) identified differentiation, cost leadership and market focus as the three components of competitive advantage. According to Lynch (2003), these three strategic options indicate an area in which every firm must choose one to compete in the market in order to achieve a sustained competitive edge.

In addition, the significance of competitive advantage was increased in the last decades. This is because the concept is considered as strategic objective which organisations must have in order to survive in business environments (Akinso, 2018). Strategy design and implementation must be considered a vital component in the firm's management process since strategy provides the direction that managers of the business have in mind, as well as the procedure by which their goals can be achieved. Firms that set out a clear strategy, which is cost leadership, differentiation

and/or focus on specific segment of the market beat those with a mixed approach (Baum & Smith, 2018). Firms should have some distinct talents and competencies that set them apart from other businesses, and these characteristics have a significant impact on their market performance and determine how long they can withstand the pressures of competition in the global market.

Nonetheless, as a result of globalisation, rivalry between businesses is increasing, and furniture manufacturers in Maiduguri are straining to compete with imported furniture from Italy, Dubai, and China. These challenges might have emerged from perceived ineffective competitive strategy in the operation of manufacturer within the metropolis.

Businesses are expected to do greater than their industry competitors within which they operate. In a developing economy, many businesses wish to acquire the biggest market growth to ensure they have the ability to generate sufficient profit in order to achieve the essence of their existence (Sumer & Bayraktar, 2012). This can only be achieved if a business develops and maintains good competitive advantage. Competitive advantage as key to Small Scale Business success and growth has increased enormously in the last decade.

Most researchers have focused on firm-specific features which are distinct, add value to the ultimate consumer, and can be transferred to a number of industrial settings. As a result, it is clear that most businesses, regardless of industry, should acknowledge that obtaining competitive advantage is the most difficult task confronting many businesses in the 21st century.

Equally, Small Scale Businesses (SSBs) regardless of their location or size must face competition in the industry they operate, identifying a successful competitive position has therefore, become a problem. For firms, experiencing these problems is magnified by the globalization of businesses, different economies of scale and scope, changing economic cycles, as well as the changing consumer preferences. While facing these competitive challenges, some firms are able to face the various issues and problems while others are not, consequently, performance suffers.

Meanwhile, it is observed that furniture manufacturers in Maiduguri Metropolis are faced with intense competition with imported products in the industry and this has prompted the necessity to create tactical means for their existence. As a result, it is critical to determine whether developing new product lines (innovation) would raise

manufacturer's scale of productivity while also reflecting on their target consumers and market growth. Inadequate product/service quality, insufficient product customisation, and lack of market focus have all hampered the performance of furniture manufacturing. This is due to a concentrated focus on issues such as planning on competitive strategy, formulation, implementation and evaluation, research and development on pricing strategy, quality of the product and service delivery.

In recent years, there have been a number of studies on competitive advantage in relation to SSBs performance. Among those studies that revealed significance positive relationship between competitive advantage and SSBs performance are Majeed (2011) in Pakistan, Mussa (2014) and Faith (2017) in Kenya. In Nigeria, Uchebulam, et al., 2015, a research in Ogun, and Olokundun et al., (2018) revealed that there is a positive relationship between product features and customer base, and product customization and sales growth.

However, in identifying the gaps for this study, it is pertinent to note that studies conducted were carried out in other parts of Nigeria. As such, there has been a paucity of literature in Northeast; therefore, using Maiduguri as a study area has created yet another gap for understanding competitive

advantage and its effect on SSB. The study is guided by the following objectives:

- i. to examine the effect of cost leadership on the performance of furniture manufacturing businesses in Maiduguri Metropolis, and
- ii. to assess the effect of market focus on the performance of furniture manufacturing businesses in Maiduguri Metropolis.

2. Literature Review

This section reviews relevant literature on Small Scale Businesses (SSBs) performance, competitive advantage, cost leadership and market focus.

Small Scale Businesses (SSBs) Performance

Performance of Small Scale Business (SSB) is of great interest to all nations in the world because it has a big potential to bring about economic and social development, thereby contributing significantly in employment creation, revenue generation and catalyzing development in urban and rural areas (Williams, 2016).

The purpose of performance is the value creation; as long as the value created with the use of the contributed assets is equal to or higher than the value anticipated by those who contributed the assets, the assets would be made accessible to different businesses,

and they continue to survive. Performance in the context of organisation is a measure of change in a firm's financial status or financial success rates that follow from management choices and the implementation of those decisions by members of the firm (Robert, 2004). Financial and non-financial measures can be used to assess business performance. Profitability, return on investment, inventory turnover and budgeted versus actual performance are examples of financial indicators, while non-financial indicators include quality of the product or service, customer satisfaction, growth in market share and efficiency of the employees (Zaman, 2014).

Therefore, small scale business performance has become a great interest for economic development to venture capital firms, governments, entrepreneurs, non-governmental organisations and financial institutions (Pulka, Ramli and Bukar, 2018). Performance management entails developing a clear understanding of what a business intends to achieve, how it wants to achieve it and a way of handling employees that increases the likelihood of success within an agreed structure of planned goals, standards, individual and team competence requirements. For understanding strategic management, performance is measured in terms of both tangible and intangible

resources. Strategic management is often argued to be very vital merely for the business, and it has revealed that the SSB's manager did not pay considerable attention to the strategic management of their firms. For any organisation to perform well, they must identify how to compete effectively and efficiently in the industry they are operating (Ifeoma, Vincent, Purity & Akaegbobi, 2021).

The Small Scale Business owners must select where and how to compete, and then a particular environmental or industrial context (Carter & Evans, 2000). These choices have a great and long-term effect on the organisation and its performance. The choice of competitive strategy within a market determines the business performance.

Competitive Advantage

The concept of competitive advantage has received a lot of consideration from researchers in the domain of strategic management, due to the fact that its definition is somewhat unclear. Porter (1985) officially presented the idea of competitive advantage, which he described as the core of a business performance in competitive market. Following quite a few years of dynamic expansion and prosperity, many firms failed to focus on competitive

advantage in their scramble for growth and quest for diversification.

Many scholars have sought to define the term competitive advantage in recent years. Competitive advantage, according to Olubiyi, Egwakhe, and Egwuonwu (2019), is defined as an organization's capacity to stay ahead of current or potential competitors. It is an organization's better performance in form of market leadership. Competitive advantage, according to Ardianus and Petrus (2016), is anything that a firm do better than its competitors. Faith (2017) viewed competitive advantage as any type of value that a business provides to its consumers (or end users) which drives them to buy its products or services instead of its rivals and by so doing, the business creates hurdles for imitation by current or future direct rivals. However, according to Chari and David (2011), competitive advantage can be gained by constantly adapting to changing trends and external activities, abilities and internal resources, as well as formulating, implementing, and evaluating diverse tactics that reinforce those variables.

Cost Leadership and SSB Performance

A strategy's purpose is to offer the company a distinct ability to face the difficulties of the environment in which it operates. A strategy starts with a concern and a burden of figuring out how best to utilise the organization's limited resources to achieve

its goals. Successful businesses, as such, make it a strategic goal to develop core competencies and long-term competitive advantages so that they serve as a real backup for the business level plans of the company's business divisions (Ifeoma, Vincent, Purity & Akaegbobi, 2021). Businesses must be able to give a set of consumer benefits at a lower cost than competitors in order to establish a competitive advantage in any market, or supply customers with package of benefits which cannot be matched by competitors (Spulber, 2009).

Furthermore, cost leadership is a technique employed by enterprises to generate a lower cost of operating within their niche with the ultimate goal of getting an edge over rivals. This is accomplished by lowering the firm's cost of operation lower than that of competitors within the same industry. However, sustainable competitive edge is a long-term mechanism which helps a company to stay ahead of its competition. Apart from short-term advantages such as being the first to market with a new variety of product, competitive advantage which is sustainable can be woven into the fabric of a firm and help it maintain supremacy for years, if not decades. Strategic efforts and the ability to constantly innovate are usually required to acquire such an advantage (Spulber, 2009).

According to Porter (1998), a firm is said to have a competitive edge over its competitors if it maintains profits that are higher than the industry average. The goal of every strategy aims to achieve a long-term competitive advantage, which can be achieved by lowering costs. Firms using cost leadership strategy must place a premium on efficiency of operation in all functional areas of the organization in order to retain a huge competitive position and retain their profit margin for an extended period of time (Porter, 1998). Becoming the lowest-cost manufacturers and providers of service in their market or industry, companies that use a cost leadership strategy can achieve relatively considerable market growth. As a result, companies who employ cost leadership strategy can make above-average profits by lowering the price of their product to match or even lower than those of rivals while still making a profit. Organizations that pursue lower costs not only operate effectively, yet, they can also emerge as effective price leaders, hindering growth of competitors in the sector by way of price war success and undercutting competitors' profitability, allowing them to provide cheaper prices, superior quality, or both (Spulber, 2009).

Several studies were conducted by different scholars in area of competitive advantage and SSBs performance. Kharub, Mor and

Sharma, (2018) carried out a research on the relationship between cost leadership competitive strategy and firm performance, and the mediating role of quality management. The study revealed that there was no direct relationship that exists between the cost leadership as a competitive strategy and firms' performances of MSMEs in India. However, Mussa (2015) carried out study on cost leadership strategy and sustainable competitive advantage of Naivas Supermarket Limited in Kenya. The result from this study indicated that there is positive relationship between cost leadership and sustaining competitive advantage. Based on the above, the following hypothesis is formulated:

H₀₁ cost leadership has no significant effect on performance of furniture manufacturing businesses in Maiduguri Metropolis.

Market Focus and Performance of SSB

A marketing approach in which a business focuses its resources on joining or extending in a certain market or segment is known as market focus. Market focus approach is normally used when a firm understands its segment and has products to meet the needs of its target market in a competitive manner. Focus or niche strategy entails segmenting markets and focusing on only one or a few customer or industrial buyer groups. It's a marketing approach in which a firm focuses

its energies on breaking into or developing into a specific market or industry area. Focus strategy determines which market segment an organization can effectively compete in. The strategy compares market features to the firm's competitive edges in order to choose markets where concentrated resources are more probably to result in targeted volumes of sales, revenues, and profits (Uchegbulam, et al., 2015). The concept stated that by focusing solely on the demands of the group, the firm can better serve them, resulting in customers' loyalty (Gamble, 2010).

Successful firms take advantage of competitive advantages in the market so as to boost their performance. Businesses can gain overall market leadership by distinguishing itself from rivals, or control the market segment in which they have focused their efforts. The focus strategy decides which market segments the firm can effectively compete. The strategy combines the features of the market with the competitive advantages of the business to choose the markets where focusing resources is likely to result in targeted volume of sales, revenues, and profits (Faith, 2017). Production at lower cost is an effective competitive advantage, but they do not apply in every market. The trick is to divide your market into segments that are both cost-effective and cost-sensitive. After

identifying the market sectors where customers are searching for a cheaper price, firms can use the focus strategy to direct the business's resources there. In a perfect world, the cost of attracting such customers would be minimal, enabling firms to keep the price advantage while concentrating on sales growth (Barney & Clark, 2007).

Some customers, however, would prefer to pay more for a higher-quality product or service. A business can have a competitive advantage in quality of a product if it has a design that is superior, more knowledgeable or having access to high quality of materials. In this scenario, however, business must find market segments that will purchase their products. If a company's competitive advantage is selling a well-known brand, it must use a focus strategy to ensure that it reaches customers who have a positive opinion of the brand, need the product and can afford to buy it. Some brands, for instance, detergents may be found in a variety of marketplaces, whilst others, such as sports-related names, require more concentration (Chari & David, 2011). A focus strategy for some firms includes focusing on promotional operations by informing consumers who are interested in the brand that it is available from the company (Barney & Clark, 2007).

Several empirical studies have been conducted on the effect of competitive advantage on the performance of SSBs. Victor and Gallen, (2018) examined the influence of competitive advantage on firm performance of small and medium enterprise (SSBs) in Indonesia. Both primary and secondary data were utilised. Questionnaires were distributed to 26 SSBs operators. Findings of the study revealed that competitive advantage is an important factor to be considered by operators of SSBs in Indonesia. Cost reduction is difficult to do, but in order to be more competitive, an attempt should be made to cut costs so as to have a cheaper price; a cheap price may persuade customers to buy the goods. However, the study used only 26 SSBs, dwelled much on cost reduction and neglected other sources of competitive advantage differentiation and market focus. Uchegbulam, et al., (2015) studied competitive strategy and performance of selected SSBs in Nigeria. 150 structured questionnaires were distributed to SSBs in Surelere and Ikeja local government areas. Finding of the study revealed that there is a correlation between product features and customer base, customization of the product and sale growth. It also revealed that products' quality and return on investment are positively correlated. This study measured competitive strategy based on features of the product, customization, value

added and quality of the product, cost leadership and excluded differentiation and market focus. Based on the above empirical evidence, the following hypothesis is formulated:

H₀₂ there is no significant effect of market focus on the performance of furniture manufacturing businesses in Maiduguri Metropolis.

3. Methodology

The study is a survey research with a population of 381 owners of the wood furniture factories registered with Borno State Ministry of Commerce and Industry, as well as, Maiduguri Metropolis Wood Furniture Manufacturers Association as at 2021. The sample size of the study is 191 which was based on Krejcie and Morgan's (1970) Table for sample size determination. Also, a multistage sampling technique was employed. The first stage was through stratification based on the location of the furniture manufactures. Secondly, a proportionate sampling method was used to allot the value of samples to each stratum. Finally, simple random sampling method was also used to get the final respondents from each of the strata.

The data for this study was obtained from primary source. Questionnaire was used to gather the data used in the study. The questionnaire was designed on a five-point

like scale (1 = Strongly Disagreed to 5 = Strongly Agreed).

The sample size of the study was 191 respondents but to reduce the level of non-response and achieve at least the minimum sample required for this study, 20% of the sample size was increased to make the sample size to become 229 as suggested by Aroh (2002) that when the population is small, the percentage of the sample size should be increased by 20%. Thus, out of the 229 questionnaires administered, a total of 211 questionnaires were filled and returned for analysis. This represents a response rate of 92.1%. General Least Square (GLS) regression was used to analyse the data.

4. Results

The data was screened for outliers. The result indicates no presence of both univariate and multivariate outliers. Skewness and Kurtosis were also employed to check the normality of the data. The collinearity of the independents variables

was also check using tolerance value and variance inflated factor and also Heteroscedasticity test was done to determine whether the variability of error terms is constant or not. The existence of heteroscedasticity indicates that the variance of the residuals or term errors is not constant and finally (See Appendix I, II & III), General least square (GLS) regression was used to analyse the data.

Hypotheses Testing

Multiple regression analysis was used to test the hypotheses of study. It was intended to examine the effect between the predicting variables and the dependent variable. The hypotheses are:

Ho¹: cost leadership has no significant effect on performance of furniture manufacturing business in Maiduguri Metropolis, and

Ho²: there is no significant effect of focus on the performance of furniture manufacturing businesses in Maiduguri Metropolis.

Table 4.14 General Least Square (GLS) Regression Results

H ₀	Variables	Coefficient	t	p>/t/	+/- Decision
	Constant	-0.4320175	-3.84	0.000	
1	Cost Leadership	0.2885926*	5.96	0.000	+Signi. (Rejected)
2	Market Focus	0.0742114*	2.16	0.032	+Signi. (Rejected)
	Hetttest				0.0142
	Hausman				0.0283
	R ²				0.9832
	F(4, 196)				256.49
	Prob > F				0.000

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ mean significance at 5%, 10% and 1% level respectively

Table 4.11 showed the coefficients and p-value of the fixed effect GLS regression model result used to assess the impact of cost leadership and market focus on performance of wood furniture firms in Maiduguri Metropolis. The results revealed R^2 of 98%, which is the multiple coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable explained by the independent variables (cost leadership and market focus). Also, it indicated that, 2% of the total variations in performance of wood furniture manufacturers in Maiduguri Metropolis are caused by factors not explained by the model.

Cost leadership was found to have a positive and significant impact on performance with a coefficient value of 0.289 and a p-value of 0.00. The positive coefficient of cost leadership on performance indicated that the higher the cost leadership traits, the higher the performance (market and customer growth) of wood furniture firms. As a consequence of the p-value of 0.000, the null hypothesis is rejected.

Market focus was also found to have a positive and significant impact on performance of furniture manufacturers with

a coefficient value of 0.074 and a p-value of 0.03. The positive coefficient of market focus on performance indicated that the higher the market focus traits, the higher the performance of wood furniture manufacturers in Maiduguri Metropolis. As a consequence of the p-value of 0.032, the null hypothesis is rejected.

5. Discussion of Findings

The study examined competitive advantage and performance of furniture manufacturers in Maiduguri Metropolis. Cost leadership and market focus were utilised as competitive strategies in this study. The study found that these variables are critical for the sampled furniture manufacturers to embrace, in order to improve their performance. The findings back Michael Porter's (1985) claim that a company must provide something distinctive than its competitors in order to have a competitive advantage. Furthermore, cost leadership was discovered to have a considerable significant influence on the performance of furniture manufacturers in Maiduguri Metropolis. This result is consistent with Victor and Gallen's (2018) findings on the impact of competitive advantage on small and medium enterprise performance (SSBs). Victor and Gallen's (2018) results revealed that in order to be more competitive, efforts should be made to minimize costs in order to have a lower pricing, since a low price may

entice buyers to buy the goods. Sitanggang and Absah (2019) discovered that cost leadership, innovation, and orientation of the customer all have a favourable and significant influence on competitive advantage.

The second hypothesis tested revealed that Market Focus was found to have a positive and significant impact on performance with a coefficient value of 0.074 and a p-value of 0.03. The positive coefficient of market focus on performance indicated that the higher the market focus traits, the higher the performance (market and customer growth) of furniture manufacturers in Maiduguri Metropolis. As a consequence of the p-value of 0.032, the null hypothesis is rejected. This finding supported the findings Faith (2017) who found that focus strategy and insurance performance are positively correlated. Likewise, Lianga and Frösén's (2019) study showed that formal controls have a direct impact on market focused learning ability and, as a result, boost the performance of the firm.

6. Conclusion and Recommendation

The paper examined competitive advantage and performance of furniture manufacturers in Maiduguri Metropolis. From the findings of the study, it can be concluded that the favourite strategy for the furniture manufacturers in Maiduguri Metropolis is

cost leadership due to strong positive correlation that it holds with their performance. The concept of charging a cheaper price and investing in technology to cut costs should indeed be held tightly to prevent outweighing the benefits achieved through automation, greater internal efficiency, and purchasing raw materials at lower prices.

Furthermore, utilizing a market focus strategy enables businesses to remain connected to customers in a certain market segment, which improves their correlation with customers. Furniture manufacturers in Maiduguri should concentrate on a certain market niche in which they are highly specialized in order to reduce operational expenses and boost market growth.

The study recommends that there is need for the wood furniture manufacturers to consider and provide reasonable price for their products/services in order to charge in way that is economical which ensure that the business gains market and customer growth.

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Appendix I

Table 4.1 Skewness and Kurtosis Tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
SSBs PER	211	0.0707	0.0014	11.66	0.0029
COSL	211	0.0019	0.0001	19.74	0.0001
MKTF	211	0.0002	0.5034	12.44	0.0020

Appendix II

TABLE 4.2 Multicollinearity Test

VARIABLES	Tolerance	VIF
Cost Leadership	0.680876	1.47
Market Focus	0.746068	1.34
Mean VIF	1.51	-

Appendix III

Table 4.12: Test for Heteroscedasticity

Breusch-Pagan Test for Heteroskedasticity

Ho: Constant variance

Variables: fitted values

Chi2(1) = 6.01

Prob > chi2 = 0.0142

Stock Market Reaction to Covid-19 Lockdown Announcement in Nigeria: An Event Study Approach

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ABSTRACT

The study examined COVID-19 lockdown announcement effect on the Nigerian stock market. The study investigated the extent of the lockdown announcement impact on the Nigerian stock market and examined whether the reaction of the market prior to the lockdown announcement is the same with the post-lockdown period reaction. The research employed the event study methodology and computed the market model for a randomly selected sample of 38 companies listed on the floor of the Nigerian Stock Exchange (NSE). The event window used in the study is 35 days (20 days prior to the lockdown announcement and 15 days after the announcement). The findings of the study showed that there was a positive market reaction during the announcement period and beyond, as significant positive average abnormal returns were recorded in the market all through the lockdown period. Conversely, negative average abnormal returns were recorded prior to the lockdown announcement. The research concluded that, lockdown during the COVID-19 pandemic has a positive significant effect on the performance of stocks in the stock market in Nigeria.

KEYWORDS: Abnormal Return, Lockdown announcement, Event study, COVID-19.

1. Introduction

Since the beginning of the century, there has been the widespread of many pandemics, including the severe acute respiratory syndrome (SARS) in 2003, the H1N1 influenza in 2009, the Middle East respiratory syndrome (MERS) in 2012 and the Ebola epidemic in 2014 (Abdulazeez, 2020). The consequences resulting from such calamities to economy, health and national security across the globe have always been enormous.

In January 2020 the World Health Organization (WHO) declared COVID-19 a world health emergency. The epidemic

propagation on a global scale and the extraordinary protection means countries around the world are using to prevent its proliferation, certainly have the consequences of flouting economic activities and aggregate demand reduction on the international scale. Tough restrictive measures naturally strengthen world financial market turbulence. The pandemic is considered by the society as a bigger threat to the economy rather than their health and there is no concern for economic saving measures declared by the governments (Oliver, 2020; Samuels, 2020).

Nigeria is the country with the largest population in Africa and considering the poor medical facilities in the country, it becomes a disaster if COVID-19 is spreading within its population. The Federal Ministry of Health has confirmed a coronavirus disease (COVID-19) case in Lagos State. The case, which was confirmed on the 27th of February 2020, is the first case to be reported in Nigeria since the beginning of the outbreak in China in January 2020. Nigeria's President Muhammadu Buhari on Sunday, 29th March, 2020 announced a lockdown of major cities worst hit by the virus. Since the first reported case in February, 2020, till June, 2020, 36,107 cases have been confirmed, 14,938 cases have been discharged and 778 deaths have been recorded in the 36 states and the Federal Capital Territory (NCDC, 2020).

The spread of the Covid-19 virus that encouraged social distancing led to the shutdown of financial markets, corporate offices, businesses and events, hence, greatly affected the global economy. Similarly, the rate at which the virus spreads and the high level of uncertainty concerning how bad the situation could be, led to a flight to safety in consumption and investment among consumers and investors (Ozili & Arun, 2020). The general consensus among top economists is that

COVID-19 pandemic would trigger a global economic recession.

The lockdown caused the global economy to slow down and that resulted in COVID-19 taking its toll on the global demand for oil, which is estimated to surpass the 2007-08 recession, when a loss of nearly 1 million barrels per day was recorded. This is also coming at a time when two key players in the global oil industry – Russia and the OPEC cartel – are at loggerheads on the decision to cut output. This may have more dire consequences on the oil price that has already started to dive.

The COVID-19 pandemic therefore, affected global economies and Nigeria is not an exemption. There was a total halt in activities as a result of the total lockdown announced by the Nigerian government. Financial markets were among the worst hit sectors as global stock markets erased about US\$6 trillion wealth within a week (Ozili, 2020). The S&P 500 index also lost over \$5 trillion within the same period and the S&P 500's largest 10 firms experienced a combined loss of over \$1.4 trillion due to fear and uncertainty among investors. Travel restrictions led to massive losses in the events, aviation, entertainment, hospitality and sports industries. These led to a combined global loss of over \$4 trillion (World Bank, 2020).

The Nigerian stock market was also affected by the Covid-19 pandemic. Barely three weeks after the first COVID-19 case was confirmed in January 28, 2020, stock market investors lost over NGN 2.3 trillion (US\$5.9bn). The market capitalisation of listed equities, depreciated by NGN2.349 trillion within a period of three weeks (February 28 to March 23, 2020), while the All-share index dropped by 20.8 per cent within the same period. The intensity of lost in investors wealth recorded in just a period of three weeks is mind boogling and therefore, calls for an empirical investigation to be conducted in order to investigate how did the stock market responded to this nationwide lockdown announcement. In this study, the researcher employed the use of event study with the semi-strong form of market efficiency hypothesis of Fama (1970) to explain the influence of the lockdown due to COVID-19 on the Nigerian stock market. Consequent upon that, the study investigates the impact of the lockdown announcement on the stock market and its effect on the average abnormal return of stocks in the Nigeria stock market.

The next sections cover literature review and hypotheses development, research methodology, results and discussions and finally, summary and conclusions of the research.

2. Literature Review and Hypotheses Development

This section presents views of existing empirical evidence concerning the link between financial markets and COVID-19 pandemic, which provide further leads to the development of the hypotheses.

Ever since, the COVID-19 pandemic was declared as a global disaster by the WHO, there has been a dearth of studies associated with the impact of COVID-19 on the stock market. In Nigeria, the researcher is yet to come across any empirical investigation on the impact of COVID-19 on the stock market. However, a number of researches have been carried out elsewhere analysing the impact of COVID-19; nevertheless the number is still negligible.

Literature showed that the COVID-19 pandemic has caused more serious financial distractions and financial market risks than those caused by previous disasters (Goodell, 2020; Zhangetal., 2020). Among the earliest studies that investigated the impact of COVID-19 on stock market is Baker et al. (2020) which analysed the role of COVID-19 developments in recent stock market behaviour and compared it with previous virus outbreaks and concluded that no previous infectious disease has ever led to daily stock-market swings that even

slightly resemble COVID-19. Examining the market reactions to the COVID-19 on the international trade and financial policies of firms, Ramelli and Wagner (2020) found a negative outcome for internationally-oriented US firms, particularly those with China exposure and the US and markets moved feverishly when the virus spread across Europe and the US. Qing Heandal (2020) analysed the direct and spill-over effects of COVID-19 on daily stock markets returns in China, Italy, South Korea, France, Spain, Germany, Japan and the USA. The findings showed that COVID-19 has a negative but short-term effect on stock markets returns in these countries. Similarly, Ozili & Arun (2020) analysed the impact of COVID-19 on the global economy and result showed that restriction on internal movement and higher fiscal policy spending positively impacted on the level of economic activities, while the increasing number of confirmed corona-virus cases did not have a significant effect on the level of economic activities.

Al-Awadhi et al. (2020) examined the effect of COVID-19 pandemic on Chinese stock market and findings showed a decrease in both the daily growth in total confirmed cases and in total cases of death caused by COVID-19 involved an increase on stock returns across all companies. In the same

spirit, Ben-Ayed et al., (2020) investigated the reaction of Tunisian stock market to the COVID-19 pandemic and findings showed that daily growth rate of confirmed cases is positively related with stock returns, whereas daily growth of deaths cases negatively affected the performance of stock returns. Badar, Nadeem and Ashraf (2020) utilised daily change in major stock index and daily growth in COVID-19 confirmed cases and mortalities data from 64 countries and found negative market response to increase in COVID-19 confirmed cases and weak market response to growth in number of mortalities.

Evaluating the relationship between COVID-19 confirmed cases and all the financial markets in USA and China, Sansa (2020) concluded that a positive and significant relationship exist between COVID-19 confirmed cases and the financial markets response in these countries. Hai Yue Liu et al., (2020) examined stock market indices of the most affected countries and found that COVID-19 confirmed cases reduced the daily abnormal return of stock market indices. El-Basuony (2020) revealed that there is a negative significant relationship between confirmed cases and death cases from COVID-19 and the trading volume on KSA and Egypt stock exchange.

Investigating the effect of corona-virus spread on stock markets, Alber (2020) documented evidence of a significant negative impact of Corona-virus spread for China, Germany, France and Spain but not for American and Italian markets. El-sayedandal (2020) examined the effects of COVID-19 spread on 17 sectors of the stock exchange of Egypt and found that stock market's returns of all sectors are most sensitive to new cases of COVID-19 and more sensitive to cumulative death indicators than daily mortalities. Gormsen and Koijen (2020) examined the impact of growth expectations by investors in the US and European countries and findings showed downward trend in dividends and GDP growth as a result of the COVID-19 lockdown. Utilising the market model event study methodology, Alam, Alam & Chavall (2020) investigated the impact the lockdown period caused by the COVID-19 to the stock market of India. These researchers examined the extent of the influence of the lockdown on the Indian stock market and whether the market reaction would be the same in pre- and post-lockdown period caused by COVID-19. The study found evidence of a positive abnormal return during the lockdown period and confirmed that lockdown had a positive impact on the stock market performance of stocks till the situation

improves.

The literature regarding the link between financial markets and COVID-19 is quite limited and therefore, this study contributes to the emerging evidence by investigating the effect of the COVID-19 pandemic on a Sub-Sahara Africa (SSA) stock market which also remains limited.

Research Hypotheses

In line with the current literature regarding the effects of COVID-19 on the financial markets, the following hypotheses are formulated for this research:

Hypothesis (H₀): there is significant positive average abnormal return (AAR) around the event date of COVID-19 lockdown announcement in Nigeria,

Hypothesis (H₁): there is a significant negative average abnormal return (AAR) around the event date of COVID-19 lockdown announcement in Nigeria.

3. Research Methodology

The study utilised the standard event study methodology. The population of the study consisted of all firms listed on the Nigerian Stock Exchange (NSE) as at 30th June, 2020. The sample comprised all firms that have price data within the period of the study. However, firms under technical suspension were dropped from the sample. Data was obtained from the Nigerian Stock Exchange (NSE) website.

The period of the study is March – April, 2020, and therefore, NSE index closing prices for that period were taken. The event is the announcement of lockdown by the federal government of Nigeria and the event date is defined as the day the lockdown was announced (i.e. 29th of March, 2020), which is taken at day 1. The assumption is that the information was known to the market on the day of the event, which was Sunday. The event window for the study is 35 days, which is defined as 20 days prior to the lockdown announcement and 15 days after the announcement.

In order to capture the abnormal returns as a result of the COVID-19 lockdown announcement, the study employed the Market Model pioneered by Ball & Brown (1968), Fama (1969), Brown & Warner (1985) and Mackinlay (1997) using the following linear model:

$$R_{i,t} = \alpha_1 + \beta_1 R_{mt} + \varepsilon_{it}$$

(1)

This model assumes that a linear relationship exists between the returns of the security to the returns of the market portfolio and it has been proven to yield valid results and a relatively powerful methodology that can be applied under a wide variety of situations (Salamuddin et al., 1999; Brown & Warner, 1985).

The daily prices of 35 trading days for pre and lockdown periods are included in the estimation period for computation of the regression coefficients for the sampled firms. A 35-days event window, -20 to +15 in the pre- and lockdown period where event date is day 1, which was the announcement day of the lockdown is used for computing the abnormal returns (AR), for each of the stocks, the average abnormal returns (AAR) of the sampled firms and the cumulative average abnormal returns (CAAR) around the date of stocks in the sample. Consistent with Alam, Alam & Chavali (2020), a comparison of the percentage of the average abnormal returns (AAR %) and the T-statistics of the period prior to the lockdown and the lockdown period are calculated and compared.

The study investigates if there is any significant positive AR that is associated with the lockdown period within the event dates and to determine the speed with which information regarding the lockdown announcements are absorbed into the security prices in the market. The study examines the extent of influence of the COVID-19 lockdown period on the Nigerian stock market and its impact on the market reaction around the lockdown period.

The hypotheses of the study are tested using the standard t-test, thus, the normality of

residuals is necessary to validate t-tests (De Medeiros & Matsumoto, 2006). In the light of this, the study utilises the Jarque-Bera Normality test (Bera & Jarque, 1981) to test for the normality of the abnormal returns.

4. Results and Discussion

Table 1 shows the number of firms by sector that are utilised as samples in the study.

Table 1 Sample Distribution of Firms

Firm	Sector
Access Bank	Financials
Africa Prudential Registrars	Technology
African Paints (Nigeria)	Basic Materials
Aso Savings And Loans	Financials
B.O.C. Gases Nigeria	Basic Materials
Berger Paints	Basic Materials
Cadbury Nigeria	Consumer Goods
Capital Oil	Oil & Gas
Costain	Real Estate
Courteville Business Solutions	Technology
Diamond Bank	Financials
Dunlop Tyre & Rubber	Consumer Services
Ekocorp	Health Care
Eterna	Oil & Gas
FCMB Group	Financials
Flour Mills Of Nigeria	Consumer Goods
Guaranty Trust Bank	Financials
Guinness Nigeria	Consumer Goods
HIS	ICT
Interlinked Technologies	Industrials
International Breweries	Consumer Goods
Livestock Feeds	Consumer Goods
Neimeth International Pharmaceuticals	Health Care
Nig – German	Natural Resources
Oando	Oil & Gas
Okomu Oil Palm	Consumer Goods
PZ Cussons Nigeria	Consumer Goods
Skye Bank	Financials
Sterling Bank	Financials
Studio Press (Nigeria)	Industrials
Tantalizers	Consumer Services
Thomas Wyatt Nigeria	Basic Materials
U A C N	Industrials
Union Bank Of Nigeria	Financials
United Bank For Africa	Financials
Unity Bank	Financials
University Press	Consumer Services
Wema Bank	Financials

Source: NSE (2020)/Researcher’s Compilation, 2020

Table 2 showed the results for thirty eight regressions of the individual firms share return series against the respective market return.

Table 2: Results of the Market Model Regression over the Event Window

	Intercept	Coefficient	Std. error	T-statistics	F-statistics	R ²	Obs	Method of Estimation
ACCESS+	-0.201140	-0.041860	0.267818	-0.156301	0.024430	0.000610	42	OLS
AFRIPRUD	4.606790	-0.000516	0.000411	-1.255191	1.575503	0.037895	42	OLS
BOC GAS	0.038733	-0.018968	0.025896	-0.732445	0.536476	0.013234	42	OLS
BPAINTS	0.020082	0.000184	0.024286	0.007559	0.994007	0.000001	42	OLS
CADBURY	0.022003	0.013378	0.010899	1.227439	0.226833	0.036298	42	OLS
COSTAIN	0.095334	0.004203	0.068797	0.061087	0.951594	0.000093	42	OLS
CTVILLE	0.005625	0.001171	0.001099	1.065679	0.292959	0.027608	42	OLS
DIAMOND	0.002115	0.001228	0.021643	0.056717	0.955053	0.000080	42	OLS
DUNLOP	0.082527	-0.024040	0.037456	-0.641823	0.524649	0.010193	42	OLS
EKOCORP	0.082527	-0.024040	0.037456	-0.641823	0.524649	0.010193	42	OLS
ETERNA	0.019912	0.005175	0.000516	10.03617	0.000000	0.715757	42	OLS
FBN	-0.002451	0.021834	0.032987	0.661911	0.511824	0.010834	42	OLS
FCMB	0.007097	0.015458	0.015107	1.023207	0.312359	0.025506	42	OLS
FLOURMILL	-0.032553	0.009994	0.023809	0.419780	0.676893	0.004386	42	OLS
GUARANTY	0.074355	-0.209539	0.140955	-1.486571	0.144968	0.052355	42	OLS
GUINNESS	0.034453	0.104814	0.039655	2.643179	0.011671	0.148690	42	OLS
HIS	0.004710	0.000633	0.001293	0.489626	0.627073	0.005958	42	OLS
IBREW	0.036676	0.037269	0.023606	1.578823	0.122253	0.058661	42	OLS
INTTERLINK	0.010245	0.007627	0.017959	0.424699	0.673332	0.004489	42	OLS
JOSBREW	0.098218	-0.008201	0.030574	-0.268251	0.789885	0.001796	42	OLS
LIVESTOCK	0.097584	0.004306	0.034975	0.123128	0.902622	0.000379	42	OLS
NIGWIRE	0.023527	-0.000680	0.000675	-1.007981	0.319677	0.025390	42	OLS
NMEITH	0.022630	0.001626	0.009955	0.163335	0.871077	0.000667	42	OLS
OANDO	0.033902	0.031574	0.042115	0.749727	0.457806	0.013858	42	OLS
OKOMUOIL	0.040846	0.001539	0.012284	0.125302	0.900912	0.000392	42	OLS
PBREW	0.001804	0.000443	0.000265	1.669033	0.103786	0.071822	42	OLS
PZ	0.009315	0.009871	0.009666	1.021167	0.313312	0.025407	42	OLS
SKYEBANK	-0.201170	-0.009201	0.050628	-0.181738	0.856707	0.000825	42	OLS
STUDPRESS	0.003274	-0.012562	0.012596	-0.997351	0.324590	0.024264	42	OLS
STERLIN	0.013483	0.004427	0.004349	1.017733	0.314921	0.025241	42	OLS
THOMSWYT	0.098981	-0.000148	0.001681	-0.088231*	0.930145	0.000200	42	OLS
TANTALIZER	0.010757	0.000397	0.003553	0.100707*	0.911614	0.000312	42	OLS
UAC	-0.004039	-0.006616	0.007765	-0.851977	0.399299	0.017823	42	OLS
UBA	0.011212	0.061665	0.024411	2.526125	0.015594	0.137584	42	OLS
UBN	0.106810	0.248542	0.096575	2.573558	0.0139	0.142058	42	OLS
UNITY	-0.017871	0.003668	0.002779	1.319756	0.194420	0.041727	42	OLS
UPL	0.002576	-0.009742	0.000411	-23.69777	0.000000	0.933509	42	OLS
WEMA	0.027351	-0.000939	0.000533	-1.761668	0.085767	0.072001	42	OLS

Source: E-views 7.0 outputs, 2020

*, **and*** imply significance at the 10%, 5% and 1% levels respectively.

The figures in Table 2 showed that the coefficient of determination (R²) which represents the explanatory power of the relationship between the variables in most of

the regressions is weak. This implied that the larger part of the variation in the dependent variable is explained by other factors outside the model, but since the study is only concerned with the part not explained by the estimated regressions (i.e. Residuals), the result will not in any way affect the analysis of the study. On the one hand, Table 2 also presented statistically insignificant t-statistic values in the majority of the regressions. In particular, only the regressions for FCMB, Thomsywatt and Tantalizer revealed statistically significant results at the five, ten and ten percent level respectively. The findings also have no bearing on the analysis of the study, since

there is no any hypothesis that was tested under any of the fifty eight regressions that were estimated in the event window or the parameter estimation window. On the other hand, the table revealed relatively low standard errors on the average, with the highest as approximately 0.8518 and the lowest being approximately 0.0004. All the fifty eight regressions are estimated using the ordinary least squares (OLS) model.

Table 3 presents results for each of the 35 days' event window, 20 days represent pre-lockdown period and 15 days represent lockdown period for the entire sample of 38 companies.

Table 3: Daily average abnormal returns (AAR) and t. statistics before and after the lock down announcement

Day	AAR (%)	T. Stat	H ₀ Test	CAAR (%)	Day	AAR (%)	T. Stat	H ₀ Test	CAAR (%)	Day	AAR (%)	T. Stat	H ₀ Test	CAAR (%)
-20	-0.1748	-2.4168	Reject	-0.1748	-8	-0.1320	-0.4345	Accept	-2.3468	5	0.0899	1.5461	Accept	0.6415
-19	-0.4435	-0.2945	Accept	-0.6183	-7	-0.4425	0.04257	Accept	-2.7892	6	0.1941	0.4361	Accept	0.8357
-18	-0.1143	-1.1822	Accept	-0.7327	-6	-0.3277	-0.7951	Accept	-3.1169	7	0.3049	0.6799	Accept	1.1406
-17	0.1720	0.1027	Accept	-0.5607	-5	-0.2708	1.4641	Accept	-3.3877	8	0.2575	1.4083	Accept	1.3981
-16	-0.1932	-1.2709	Accept	-0.7539	-4	-0.2454	0.8670	Accept	-3.6331	9	0.3933	0.3154	Accept	1.7915
-15	-0.1276	-1.6983	Reject	-0.8815	-3	0.2112	-0.6007	Accept	-3.4219	10	0.4225	2.1300	Accept	2.2140
-14	-0.0445	2.2100	Accept	-0.9260	-2	-0.0195	0.8243	Accept	-3.4414	11	0.2243	2.2902	Accept	2.4383
-13	-0.4555	1.6201	Accept	-1.3814	-1	-2.1143	0.3384	Accept	-5.5557	12	-0.1979	2.2751	Accept	-2.6362
-12	-0.3065	0.3558	Accept	-1.6880	1	5.5431	-0.4238	Accept	8.9666	13	0.5538	-0.2585	Accept	3.1901
-11	-0.3155	-0.8408	Accept	-2.0034	2	0.0689	-2.2736	Reject	0.0689	14	-0.2868	0.4758	Accept	-3.4769
-10	-0.1487	-0.8696	Accept	-2.1521	3	-0.1888	-0.8149	Accept	-0.2577	15	0.3110	-0.6409	Accept	3.7879
-9	-0.0627	-1.2293	Accept	-2.2148	4	-0.4737	0.7208	Accept	-0.7314					

Source: E-views 7.0 outputs, 2020

Table 3 reported the average daily AARs and CAAR for the day's t-20 to t+15 along with the test statistics obtained. The AARs are all negative prior to the lock down announcement, except for days -17 and -3. However, it is observed that there are significantly positive AARs in most of the days after the lockdown announcement. CAAR is also seen to be significantly positive in the event window. This result led to the acceptance the first hypothesis (H0) of the study that there is significant positive average abnormal return (AAR) around the event date of COVID-19 lockdown announcement in Nigeria.

The result indicated that the lockdown announcements have significantly increased the returns of the majority of the stocks in the sample. The implication of the finding is that the significant increase in the stock returns may be as a result of the lockdown announcement news; because the market anticipated that the lockdown could control the spread of the virus in the country which would ultimately benefit the country's stock market in the long run. Consequently, all stock market players received the lockdown announcement as positive news and therefore, hailed the decision of the government, which ultimately reflected on stock returns in the market.

Table 4: Average abnormal returns (AAR) before and after the lock down announcement

Event Window	AAR (%)	T. Stat	Test of H0	Level of Significance
Before the COVID-19 lock-down announcement	-0.003	-	Reject	
After the COVID-19 lock-down announcement	0.036	3.422	Accept	

Source: E-views 7.0 output, 2020

Table 4 showed the comparison of AARs across different event windows prior and after the lockdown periods. Prior to the lockdown, the stock market reaction was negative, which led to the rejection of the first hypothesis (H0) at the 5-percent level of significance. In the period prior to the lockdown announcement, the AAR was negative and thus, hypothesis H0 was rejected. This may not be far from the fact

that, the whole world was panicked by the pandemic. The enormous withdrawals from the stock market therefore, contributed to the negative AAR, and investors were eager for a policy formulation that serves as a protective measure in preventing spread of the virus. Consequent upon, the global market reaction, in the pre-lockdown period in Nigeria, investors engaged in heavy withdrawals of capital and disposal of the stock, which might have led to the negative

AAR prior to the lockdown announcement. Conversely, on the day of the lockdown announcement and beyond, the AARs were positive and, therefore, the hypothesis (H₀) is accepted. The reason for the positive AARs in the market after the announcement may be that the stock market had anticipated the announcement of the lockdown by the Government and predicted that it would be favourable. Similarly, investors were also eagerly waiting for such measures from the Government.

5. Conclusions

The COVID-19 pandemic has greatly affected the global economy. Nigeria is the most populous country in the African continent; therefore, the pandemic was particularly dangerous to Nigeria. The pandemic approximately has affected all stock markets around the world. The outbreak of the virus is the greatest crisis of the century so far. Total lockdown and social distancing were declared as the only solutions to preventing the spread of the virus until vaccines were available. Although, the lockdown announcement was eventually made in Nigeria, the announcement was a little bit late and this was clearly evident in the period prior to the lockdown announcement when AAR was negative. With the lockdown announcement, the stock market immediately responded positively which was evident in the positive

AAR recorded in the stock market after the announcement.

The study also found evidence of positive AR around the lockdown period and confirmed that the lockdown has positively impacted the stock market performance until the situation improved in the Nigerian context. However, the result held true for the selected samples of firms listed in the floor of the NSE during the period considered for the study. Furthermore, the findings of the study cannot be generalised to other traded stocks, neither can it be generalized for other periods in the future or in a different market context. The implications of the study findings are that investors can take precautionary steps before trading in stocks during any period of a lockdown. Whereas, investors that are risk averse can completely stay away from trading around the lockdown to avoid the risk associated with stocks volatility in the lockdown period. The result of this study would be of benefit to policy makers, investors and researchers as it may help them better understand and evaluate the impact of the lockdown on stock markets caused by COVID 19.

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Interest Rates and Stock Returns of Nigerian Quoted Insurance Firms

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ABSTRACT

*The study used the Autoregressive Distributed Lag (ARDL) estimation model to establish the short-run and long-run relationship between interest rates and the return on the stock of insurance firms listed in Nigeria. The study adopted ex-post facto research design because it used secondary sources to extract data regarding the exchange rate of the Nigerian naira to the United States dollar, inflation rate and interest rate. The population of interest comprised all Nigerian insurance businesses, publicly traded on the stock exchange between January 2019 and December 2020. As of December 2020, there were 25 insurance firms listed on the Nigerian Stock Exchange, representing the target population for the research. After applying a filter, twelve (12) specified insurance firms were included in the sample size. For data testing, the research used parametric techniques. Using Eviews version 9 software, the model is estimated using Autoregressive Distributed Lag (ARDL) methods. The findings of the long-run and short-run coefficients showed that interest rates affect the return on the stock of insurance firms listed in Nigeria. The exchange rate positively and significantly impacted stock returns over the long and short run. Conversely, inflation and interest rates negatively and significantly **long-short-run** affect the insurance industry's portfolio returns. As such, Investors should diversify their investment in developing and emerging markets domestically and abroad to reduce the risk associated with the interplay of interest rates.*

Keywords: Interest rates; Stock Return; Insurance firms; Nigeria

1. Introduction

As economy grows, the importance of the stock market cannot be overstated. Companies raise money for development or growth by selling shares to the public, who are prepared to put their money into a lucrative venture via the stock market. Investors can own a stake in businesses and partake in the financial rewards of collaboration via market (Green, 2015;

Alam & Uddin, 2019). This implies that stock market acts as a financial mobiliser by connecting businesses and investors in a way that benefits both parties. Both private and public capital may be accessed via the stock market, thus, stimulating economic development (Allsopp & Vines, 2020). A stock index for the whole market or a specific market sector includes information on stock market performance, which serves

as a metric for adjusting the stock market (Benigno, 2020).

Internal and external reasons cause stock price fluctuations and volatility. Earnings reports, mergers and acquisitions, dividend suspension and new innovative products are just a few examples of in-house aspects. Share prices rise when a business's profits are favourable, for example, owing to increasing demand from investors willing to invest in a well-established company (Dabo et al. 2019). Consequently, the interest rate positively or negatively affects stock market activities and assesses stock return patterns (Utami et al., 2016). In this regard, this study aims to assess the long-term and short-term effects of interest rates and stock returns of insured companies in Nigeria to help investors and insurance players understand and appreciate the interplay between interest rates and stock market performance in Nigeria, with particular reference to insurance induced.

To demonstrate the interplay between the interest rates and stock returns, Quayes and Jamal (2018) claimed that the interest rate is the persistent rise in the overall price level of goods and services and affects stock returns. Okoro (2017) argued that an increase in the interest rate may trigger a rise in the nominal interest rate, and as a result, there may be a rise in demand for bonds and

a decline in demand for a stock. In this regard, Quayes and Jamal 2018 believed that stocks and bonds compete in portfolio allocation. The consequence of this circumstance is a decline in a company or industry's stock returns. An increase in inflation could erode investors' purchasing power and, by extension, affect companies' stock returns on the stock exchange market. For example, a Central Bank of Nigeria survey showed that Nigeria's inflation rate increased from 8.60 per cent to 14.4 per cent between January 2018 and January 2020. Thus, the Nigerian Stock Market was also adversely affected by this change.

This implied that interest rates affect the insurance industry's share of pricing changes. Because of the growth in total expenses and a lack of cost adjustment, the consumer price index may negatively impact insurance firms' profitability (Sharan, 2022). Additionally, a rise in short-term discount rates, such as the Treasury Bill Rate, may lead investors to prefer holding liquidity in form of short-term investments over long-term investments, such as stocks. As such, insurance company stocks in Nigeria tend to drop.

It is observed that previous studies left gaps which the present research seeks to fill in order to understand better how stock returns are linked to interest rates. For instance,

macroeconomic factors such as interest rate and inflation rate considerably affect stock returns in studies such as Erdogan and Ozlale (2005), Akonnor (2016), Mugambi and Okech (2016), Dabo et al. (2019), Pourrahnama and Daei-Karimzadeh (2020) and Aliyu (2022). Conversely, the findings of Morosan and Zubas, (2015), Rabia and Khakan, (2015), Nisha, (2015), Okoro (2017), Ali (2020), Ali and Jamil, (2021), and Nisha et al., 2022; revealed that the interest rates are not relevant in understanding stock-return movement. At the same time, other previous studies concentrated more on the returns of the stock market as a whole rather than taking into cognisance the peculiarity and heterogeneity of each industry within the stock exchange market. Some of these studies include: Uwubamwen and Eghosa (2015), Morosan and Zubas (2015), Safitri and Kumar (2020), Pourrahnama and Daei-karimzadeh, (2020) and Alam and Haseebullah (2021).

This clearly showed an inconsistency in the previous prompt the researcher to confirm earlier studies' conclusions. In addition, a review of related literature suggested that systematic research on the role of interest rates on stock returns in insurance firms is lacking (Quadir, 2022). The majority of previous studies concentrated on deposit money institutions. Hence, insurance firms

were taken into account in the current investigation. This is because, aside from shielding people and businesses from a wide range of possible hazards, insurance firms make a substantial contribution to the nation's economic expansion by ensuring the smooth operation of enterprises and producing long-term financial resources for industrial projects. Hence, this study decides to fill the gap by focusing on the stock returns of listed insurance firms in Nigeria. Consequently, this study uses the Autoregressive Distributed Lag (ARDL) proposed by Pesaran et al. (2001) to address the shortcomings of conventional models. Unlike other methods for estimating co-integration relationships, the ARDL model does not require lag-length symmetry; each variable can have different lag-length terms.

The Study's Objectives

The aim of this study is to explore the influence of interest rates on insurance firms' stock returns in Nigeria. The objectives are:

- i) to examine the long-term effect of interest rate volatility on the share price of listed insurance firms in Nigeria, and
- ii) to assess the short-term impact of interest rate volatility on the share price of listed insurance firms in Nigeria.

2. Literature Review and Hypotheses

Development

The Stock Return Concept

According to Bolten (2020), stock returns are a claim that an investor has, in the form of distribution, generally in the form of cash dividends on any future benefits transmitted from a firm to the investor. Investing is a two-way street with firms competing for investors' limited cash while investors seek investments with a high probability of attractive returns. Further, Bolten (2020) claimed that stock values often fluctuate, resulting in market quotes rising and falling regularly. Investing in equities in an efficient market, according to Vena (2020), yields a profit for investors. Depending on the company's nature, income or dividend may be paid out in response to these investments. As defined by Uwubanmwun and Eghosa (2015), stock return is the sum of a company's dividend and an increase in its stock price. According to Mugambi (2016), stock return is the increase or decrease of a share's value over a particular time, expressed most commonly in percentages. Invested money's total income includes both profits and losses.

It can be synthesised from the initial concept of stock returns by various scholars that stock returns are appreciation or depreciation of an organisation's share prices. It also means the dividend an

investor earns on a company's share. However, Uwubanmwun and Eghosa's definition of stock returns is more relevant to this study because it recognised the volatility or appreciation of the share price as meaning returns, which means the firm's ability to make efficient use of investors' investments.

The Interest Rates Concept

The cost associated with using the owner's money or material possessions is known as the interest rate. According to Alam and Uddin (2019), interest rates are the costs associated with using money or other assets that a debtor has borrowed from a creditor. In other words, money can be deposited and generate interest for a particular time (Nshom, 2017; Okechukwu, 2017). According to the parties' agreement, interest payments are typically paid yearly. Prudent investors usually look forward to investing in a competitive market where fewer individuals may produce more significant than average profits (Allsopp & Vines, 2020; Nshom, 2017). This means that investors would be enticed to move their cash away from the stock market and toward banks or bonds if interest rates on deposits or bonds are raised. Morosan and Zubas (2015) claimed the shift often results in a decline in share demand and a corresponding decline in share price, and vice versa. Nevertheless, when lending

interest rates rise in response to rising deposit interest rates given by banks to depositors, investments in an economy tend to decline (Alam & Uddin, 2009). The fee a borrower of tangible commodities pays the owner as compensation for using the assets is also referred to as the interest rate (Sharan, 2022).

Interest Rate and Stock Return

The monetary policy relies heavily on the interest rate; the central bank's primary tool for short-term control (Allsopp & Vines, 2020). The interest rate channel is expected to influence monetary policy and the stock market, which influence private sector decision-making (Benigno, 2020). In contrast, Ali (2019) asserted that interest rates might have a short-term impact on a company's intention to raise capital by issuing stock securities or bonds. Borrowing expenses seem lower when interest rates are low since the borrower pays less interest. The low-interest rate encourages economic investment and growth, which also leads to a higher stock price. (Alam & Haseebullah, 2021).

As Fama (1981) argued in Alam and Haseebullah (2021), predictable inflation has a negative relationship with predicted economic activity, which in turn has a positive relationship with stock market returns. Stock market gains might thus, be

adversely connected with projected inflation, typically used as an indicator of the short-term rate. Fama (1981) said that the discount rate is directly influenced by the long-term interest rate, which the current value model influences. Variations in interest rates impact family spending and savings, as well as corporate and individual investment choices. Based on these, the following hypotheses are formulated:

- Ho₁** interest rate has no significant long-term effect on the share price of the insurance companies listed in Nigeria, and
- Ho₂** interest rate has no significant short-term impact on the share price of the insurance companies listed in Nigeria.

Theoretical Reviews

Arbitrage Pricing Theory (APT)

In 1976, Stephen Ross advocated the Arbitrage Pricing Theory. The theory explained how financial assets are priced by considering the risk linked to the assets. The theory believed that stock prices represent the interplay between interest rates and stock returns. To put it another way, interest rates play a crucial role in share price volatility. The APT claimed that any expected onset of new information concerning macroeconomic variables such as exchange rate, inflation rate, interest rate, industrial production, gross domestic product and many other

variables influence the share prices, which ultimately affect the stock expected returns. The theory explained how changes in interest rates as of the variables of macroeconomic factors instigate fluctuation in share prices. The overall idea behind APT is that interest rates are influential and financial assets are sensitive to macroeconomic factors.

The APT may be expressed in the formula below:

$$E(r_j) = r_f + b_{j1}RP_1 + b_{j2}RP_2 + b_{j3}RP_3 + b_{j4}RP_4 + \dots + b_{jn}RP_n$$

Where:

$E(r_j)$ = depicts asset's expected rate of return

r_f = depicts risk-free rate

b_j = shows the sensitivity of the asset's return to the particular factor

RP = is the risk premium associated with the particular factor

APT is an innovative model because it allows the user to adapt the model to the evaluated security and helps the user determine whether a security is overvalued or undervalued. It is also crucial for building a portfolio, as it gives managers room to test their portfolio's exposure to specific factors.

Review Empirical Studies

Okonnor (2016) examined the impact of macroeconomic conditions on stock values. The research used the Arbitrage Pricing Theory (APT) to examine how interest rates

affect stock prices in Ghana. The independent variables were the inflation rate, the yield on Treasury Bills, cocoa prices, crude oil prices, gold prices, the balance of payments, GDP and the exchange rate. From 2006 to 2020, the data was gathered from a secondary source and analysed using OLS. The issue of multicollinearity was discovered and solved using step-by-step backward regression after the Global Validation for Linear Model Assumptions revealed the existence of the multicollinearity research test. Inflation and cocoa prices in Ghana have a strong correlation with stock prices according to the research. In Ghana, thus, GDP and the exchange rate have a negative relationship with stock price movement.

To demonstrate the impact of interest rates on the stock returns of listed commercial banks in Kenya, Mugambi and Okech (2016) utilised the exchange rate, interest rate, inflation rate, and GDP as independent variables and the share price as a dependent variable. Using secondary data from the Kenyan Statistics Bureau and Bloomberg databases, the analysis covered from 2015 to 2020. The regression coefficient was calculated using an OLS model with a fixed effect. According to the research findings, inflation, currency, and interest rates have a negative and substantial link with the stock returns of Kenya's listed commercial banks.

However, GDP is of little significance in understanding the link between stock returns and GDP. This study assumed that Mugambi and Okech's (2016) findings would have been enhanced with a more robust model.

Furthermore, data from Bombay Stock Market discovered a link between macroeconomic factors and stock performance. Time series data from January 2010 to December 2015 was analysed monthly. The Vector Autoregression model (VAR) was used to decrease the independent variables (industrial production index, consumer price index, money supply, interest rate, exchange rate and gold price) against the dependent variable (share price). The study additionally employed an Improved Dickey-Fuller test to ensure that the results are not influenced by random chance. One variable alone, the interest rate, was shown to have a substantial positive

relationship with Bombay Stock Exchange Market returns, according to the findings of this research.

Okoro (2017) investigated the relationship between inflation rates and stock market performance in Nigeria. The research examined time series data from 1986 to 2015 and used GDP, money supply, inflation and interest rates, exchange rates and stock market performance as dependent variables. The research used OLS method to analyse the data. According to this research, interest rates cannot be used to explain price changes in Nigerian stocks. Thus, the study recommended that subsequent empirical research should concentrate on other macroeconomic factors that might favour Nigerian stock market values. Using other macroeconomic factors and a more robust model might have substantially impacted Okoro's (2017) findings.

Study's Model

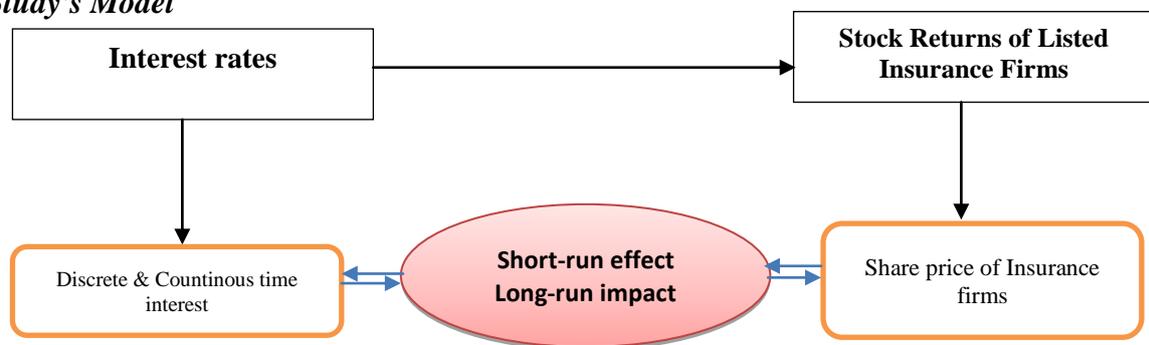


Figure 1: Author's Conceptualisation, 2022

3. Methodology

This study used an ex-post facto research design to test hypotheses concerning the

relationship between dependent and independent variables. This is because the data was extracted from a pre-existing

source rather than an actual experiment. The population of interest comprised all Nigerian insurance businesses publicly traded on the stock exchange between January 2019 and December 2020. As of December 2020, there were 25 insurance firms listed on the Nigerian Stock Exchange, representing the target population for the research.

On the Nigerian Stock Exchange Market, all listed insurance firms with comprehensive financial statements before January 1, 2021,

are included in the study's sample size. According to the following table, the sample size was reduced to twelve (12) insurance businesses listed on the Nigeria Stock Exchange Market. The sampled insurance firms are marked "yes" in the table's sample column to show that they were included in the study's sample size. In contrast, those marked "no" were omitted from the sample because their financial statements were incomplete.

Table 1: Listed Insurance Firms in Nigeria

S/N	Insurance firms	Date Listed	Data	Sample
1	African Alliance Insurance	17-9-2019	Incomplete	No
2	Aiico Insurance	1990	Complete	Yes
3	Axamansard Insurance	19-11-2019	Incomplete	No
4	Consolidated Hallmark Insurance	22-2-2018	Incomplete	No
5	Continental Reinsurance	30-5-2017	Complete	Yes
6	Cornerstone Insurance	13-8-1997	Complete	Yes
7	Equity Assurance	18-7-2017	Incomplete	No
8	GoldLink Insurance	12-2-2018	Incomplete	No
9	Great Nigerian Insurance	11-10-2005	Incomplete	No
10	Guinea Insurance	1-1-1990	Incomplete	No
11	International Energy Insurance	13-7-2017	Incomplete	No
12	Lasaco Assurance	1991	Complete	Yes
13	Law Union and Rock Insurance	9-7-1990	Complete	Yes
14	Linkage Assurance	18-11-2003	Complete	Yes
15	Mutual Benefits Assurance	28-5-2002	Complete	Yes
16	Nem Insurance	5-9-1990	Complete	Yes
17	Niger Insurance	1-9-1990	Complete	Yes
18	Prestige Assurance	3-12-1990	Complete	Yes
19	Regency Assurance	27-5-2018	Incomplete	No
20	Sovereign Trust Insurance	29-11-2006	Incomplete	No
21	Staco Insurance	25-6-2017	Complete	Yes
22	Standard Alliance Insurance	19-12-2003	Incomplete	No
23	Universal Insurance	11-2-2018	Incomplete	No
24	Veritas Kapital Assurance	17-12-2019	Incomplete	No
25	Wapic Insurance	1-9-1990	Complete	Yes

Source: NSE, 2021

From 2011M1 to 2020M12, the data was extracted from the secondary source every month during the analysis to ensure that a

sufficient number of observations produce a better result. Data were collected from the Statistical Bulletin of the Central Bank of

Nigeria (CBN) regarding the exchange rate of the Nigerian naira to the United States dollar, inflation rate and interest rate. In contrast, data on the returns of the listed insurance firms in Nigeria were obtained from the Nigerian stock exchange market historical database for the period covered by the study. The analysis employed data processing using parametric methods. The model is estimated using Eviews version 9 software based on the Autoregressive Distributed Lag (ARDL) techniques. Pre-test analysis based on descriptive and Augmented Dickey-Fuller (ADF) tests was used to obtain a sense of the variables' characteristics and to ensure that none of the variables was stationary at the second I(2) discrepancy. One of the ARDL model's assumptions is that none of the study's variables should be stationary at I(2).

4. Result and Discussion

Post-estimation Diagnostic Test

To determine the robustness of the model, some diagnostic tests (normality, serial

correlation and heteroscedasticity) were conducted and the results are presented in Table 2. The rule of thumb for all the tests is that if the P-value > 0.05, the study accepts the null hypothesis and rejects the alternative hypothesis. The hypothesis for the normality test is set as follows:

H₀: Sample is normally distributed. H₁: Sample is not normally distributed.

The hypothesis for the serial correlation test:
H₀: No serial correlation. H₁: Serially correlated.

The hypothesis for heteroskedasticity test:
H₀: Homoscedastic. H₁: Heteroskedasticity.

From Table 2, the P-value for the entire test is more significant than 0.05. This means that the null hypotheses of samples are normally distributed, no serial correlation, and homoscedastic fail to be rejected. The alternative hypothesis of samples is not normally distributed, series are correlated, and the presence of heteroskedasticity results from this rejection.

Table 2: Diagnostic Tests Results

Test	Statistics	P-value
Normality	0.179161	0.914315
Serial correlation	0.040177	0.9503
Heteroskedasticity	0.349848	0.6988

Source: Eviews 9

Additionally, a stability test was carried out by this study using a Cumulative Sum Chart

(CUSUM) and the cumulative sum of square (CUSUMSQ) test with the view to verify

whether or not the model of the study is stable and the result is presented in figure 2. The rule of thumb is that when the recursive error line is less than 0.05 and lies in-between the critical lines, it indicates that the model is stable. Therefore, Figure 2 revealed that the model of this study is stable as the recursive error line lies between the critical lines and is less than 0.05.

Figure 2: CUSUM: Model Stability Test

Result

Hypothesis One

The interest rate has no significant long-term effect on the share price of the insurance companies listed in Nigeria.

Long-run ARDL Estimation

Table 3 is the long-run result of the ARDL model. The result is used to test hypotheses 1, 3 and 5 earlier established in Chapter One of this study. The findings revealed a positive and significant association between EXR and SP at a 1% significance level. It implied that a 1% increase in EXR would attract a response of a 0.0009 point increase in SP. In addition, a negative and significant relationship exists between CPI and SP at 5% significance. This means that when CPI

is increased by 1%, there would be a corresponding 0.015 point decrease in the SP. The probability value of TBR (0.0316) showed a negative and significant relationship between TBR and SP. The result revealed that a 1% increase in TBR would result in a 0.010 point decrease in the SP. Based on the impact of the long-run estimation, the null hypotheses of no long-run relationship between the independent variables and dependent variable of the study are rejected, and the alternative hypotheses of long-run relationship are accepted.

Furthermore, the R^2 of the model indicates that 95% of the variation in Stock Price (SP) is described by the mutual effect of the independent variables used in the study. The remaining 5% is explained by the variables not captured in this study. The Durbin-Watson statistic of 1.79 can be approximated to the value of 2, which showed the absence of autocorrelation in the series used in the model. Equally, the probability of the F-statistic (0.000000) is highly significant, pointing to the fact that the model of the study is fit.

Table 3: Long-run Coefficients of ARDL (4, 0, 1, 0, 9) Model
Dependent Variable: SP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	0.000948	0.000322	2.946287	0.0042
CPI	-0.014945	0.006074	-2.460565	0.0160
TBR	-0.010145	0.004637	-2.188006	0.0316
DUMMY	-0.480073	0.072470	-6.624469	0.0000
CointEq(-1)	1.327912	0.067946	19.543592	0.0000

$R^2 = 0.853524$, Adjusted $R^2 = 0.84907$, DW = 1.09, F-Stat = 92.29152 (0.00001)

Source: Eviews 9

Hypothesis Two

Interest rate has no significant short-term impact on the share price of the insurance companies listed in Nigeria.

Estimated Short-run ARDL Model

****The estimated short-run coefficients of the ARDL in Table 4, test hypotheses.** The result showed that EXR has a positive and statistically significant short-run impact on SP. An increase in EXR by 1% would result in a 0.000325 point increase in SP. The result also revealed that CPI has a negative and statistically significant short-run impact on SP. 1% increase in CPI would bring about a 0.017819 point decrease in SP. Similarly, TBR has a negative and statistically significant short-run relationship

with SP. A percentage increase in TBR would translate to a 0.003482 point decrease in SP. Based on this premise, the null hypotheses set to short-run relation between the independent and dependent variables are rejected, and the alternative hypothesis is accepted. The coefficient of the error correction term (-0.343) is less than 1 and is highly significant at 1% level of significance (0.0000). Furthermore, the coefficient of the error adjustment term has a negative sign which further validated the earlier confirmation of the presence of long-run relationships among the variables. It suggested that in the event of disequilibrium in the Share Price, the system may correct itself back to equilibrium at the speed of 0.34% every month.

Table 4: Estimated Short-run Coefficients of the ARDL Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	0.000325	0.000130	2.501741	0.0144
CPI	-0.017819	0.004911	-3.628245	0.0005
TBR	-0.003482	0.001681	-2.071427	0.0415
DUMMY	-0.119788	0.039975	-2.996554	0.0036
CointEq(-1)	-0.343198	0.064104	-5.353808	0.0000

$R^2 = 0.85912$, Adjusted $R^2 = 0.90121$, DW = 1.62, F-Stat = 95.01519 (0.00010)

Source: Eviews 9

Discussion of Findings

The study used the ARDL estimation model to determine the long-run and short-run relationship between interest rates and the return on the stock of insurance firms listed in Nigeria. The model assumed no variable should be stationary at the second difference I(2). Hence, the researchers tested the sequence through the Augmented Dickey-Fuller (ADF) testing techniques. The results produced by the ADF showed that the independent variable is stationary at a level I(0), and the other variables at the first difference I(1) are stationary. The outcome is set out in Figure 2. So, this justified the application of ARDL to model the study series.

The interest rate is the variable that has a more relevant influence on the stock returns of the listed insurance firms in Nigeria due to both long-run and short-run estimates. It was also found that the velocity of change to long-run equilibrium is 0.34% per month in the event of disequilibrium. The findings contradicted other reviewed studies such as Uwubanmwun and Eghosa (2015), Okoro (2017), Mlambo, Maredza and Sibanda (2021), Safitri and Kumar (2020), Rabin and Khakan (2015), among others. However, the study is consistent with findings from, among others, Ifionu and Ibe (2015), Qamri, Abrar Ul Haq and Akram (2015), Ali (2020), Pourrahnama and Daei-karimzadeh

(2020), Alam and Haseebullah (2021), Okonnor (2016) and Aliyu (2022). The results also supported Stephen Ross's propounded Arbitrage Pricing Theory. The theory noted that interest rates influence returns on stocks. The null hypothesis is therefore, rejected for both long-run and short-run relationships and the alternative hypothesis is accepted.

Conclusions and Recommendations

Based on the findings from the long-run and short-run estimation of the ARDL model, the study concluded that interest rates impact the stock returns of insurance firms listed in Nigeria. The exchange rate positively and significantly affects stock returns over the long and short run. Conversely, inflation and interest rates have a negative and significant long-run and short-run impact on the insurance industry's stock returns. Based on the study's analytical results, the report proposes:

- i. Monetary authorities in Nigeria should keep interest rates low to make the share prices of the insurance industry and other industries attractive to local and international investors. Higher returns on stock may be achieved when the interest rate is decreased, which would help the insurance industry to trail on the path of growth.
- ii. The listed insurance firms should intensify their efforts to appeal to

investors because the firm's stocks seem to be a good hedge for investors. This implies that companies should undertake worthwhile projects to boost their performance over time by considering that investors are always ambitious in firms with good financial performance.

- iii. Many people are still not aware of the operations of the stock exchange market. The insurance industry should enlighten potential investors about the benefit of investing in their shares for mutual benefits.

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Mediating Effect of Customer Satisfaction on the Relationship between Service Quality and Customer Retention: A Study of Jaiz Bank Plc Operations in Kano Metropolis, Nigeria

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Abstract

This study examined the mediating effect of customer satisfaction on the relationship between service quality and customer retention in Jaiz bank Plc, Kano Metropolis, Nigeria. Customer's choice of a bank, loyalty and bank's ability to retain such customer depend on the quality of service rendered by the bank. Structural equation model was analyzed using Analysis of Moment Structures (AMOS) on the 366 samples collected from the five branches of Jaiz bank located in Kano metropolis. The discovered results revealed a full mediation effect of customer satisfaction. The results also showed 58 percent indirect significant effect of customer satisfaction in the relationship between service quality and customer retention. Furthermore, the findings revealed R^2 value of 0.81 which indicated that Service Quality and Customer Satisfaction explained 81 percent of the variance in customer retention. Based on the findings, it is recommended that the bank should conduct periodic and regular customer feedback on service experienced such as calling the customer and use of mystery shopper to enquire customer's experience. The study also recommended that staff appraisal should objectively reflect performance, based on defined and measurable service indicators, as they serve as an interface between the bank and the customers.

Keywords: Service Quality, Customer Satisfaction, Customer Retention, Jaiz Bank.

1. Introduction

Service industry especially banks have become conscious of the importance of effective customer management, which helps to retain and maximize the lifespan of existing customers while attracting new ones. Customer management generates a win-win relationship between the bank and the customer. Singh and Khan (2012) stated that customer retention earns an organization good reputation and goodwill

in the open market, the lifespan of the relationship between the customer and the organization is the best proof regarding the quality of the products and the services provided by the organization. Customer retention is not just meeting customer's expectation; it is exceeding customer's expectation, winning their loyalty and converting them into advocates of the organizational brand.

The banking industry has become very competitive owing to the speedy growth in technological advancement and improved communication systems (Felix, 2016) and Islamic banks are not exempted from these challenges. Financial services provided by banks are generally similar; the banks can only differentiate themselves by providing excellent service which is necessary for attracting and retaining more customers (Shafie, Azmi & Haron, 2004). Direct interaction between bank's employee and customers helps in building long term relationship because most customers still prefer to conduct their transactions directly in the bank's premises despite the availability of other means of carrying out transactions such as Automated Teller Machine (ATM), mobile banking, internet banking among others (Richard & Mensah, 2014). Therefore, paying attention to customer relationship through the provision of excellent service becomes paramount. An excellent service experienced by a customer can change the entire perception of the customer towards the organization. In addition to having a robust retention strategy, organizations engineer and motivate staff to focus on delivering quality services. This must be done in such a way that staff sincerely believed that they can make a difference with the effort employed in delivering excellent services.

The banking sector in Nigeria is made up of commercial banks, merchant banks and specialized banks. The non-interest bank falls under the category of the specialized banks (Jaiz bank plc, 2016). Money deposit banks comprise of commercial banks whose banking operations are similar to that of non-interest banks in aspect of attracting customers, striving to meet their needs and assisting them to attain maximum satisfaction with the services provided. Also, non-interest banks differ in their mode of operation in terms of deposit mobilization and risk asset creation. In contrast to commercial banks, non interest banks financing is profit based rather than interest based; all financing are assets based not cash lending and mandatory ethical and moral screening is a core value of non interest banks (Jaiz bank plc, 2016).

The banking sector grew by 19.74% in nominal terms in 2016. The overall rate was higher than that in fourth quarter of 2015 by 3.03 % points, and lower by 0.91 % points than the preceding quarter. The sector's contribution to the overall nominal gross domestic product (GDP) was 3.33 % in fourth quarter of 2016, higher than the 3.14% it represented the previous year, and down from the contribution of 3.51 % it made in the preceding quarter (National Bureau of statistics, 2017). The quality of service being provided plays an important

role in boosting the morale of the customers by increasing patronage, loyalty and subsequently retains the customers (Felix, 2017).

Islamic banking arised from the need for compliance with Shariah (Islamic law and jurisprudence), which strictly forbids interest (Riba) (Abdullrahim, 2010). Thus, Islamic banks employ a number of means of financing to derive returns on their investment such as safekeeping; partnership based contract (joint venture and limited partner); sales based contract (mark up sale, forward sale and deferred payment sale) and lease based contract (operating lease) (Jaiz Bank Plc, 2016). In Nigeria, Jaiz Bank Plc is the first full- fledged non-interest Islamic bank operational with a paid up capital of 14.7 billion divided into 50 kobo ordinary share capital of 29.464 billion which is in excess of the threshold required for specialized banks (Jaiz Bank Plc, 2017). The bank broke even in the first three years of its operations and has remained profitable since then (Jaiz Bank Plc, 2016). The unaudited half year financial statement and account of 2017 showed a profit of 470.193 million with a projected profit of 1.916 billion at the end of the year 2017 (Jaiz Bank Plc, 2017). The laudable achievement of Jaiz Bank Plc is an indication that the bank's products and services are patronized by Nigerians especially in the northern

region of the country where the bank started its operations. Studying service quality and customer retention in Jaiz Bank Plc will certainly provide a clear picture of the quality of its services and how best such services influence customer satisfaction towards retaining those customers.

Islamic banks primarily attract customers based on the customer's ethical inclination, but the desire to translate this customer base into everyday financial dealings and the sustainability of Islamic banks in the long run is based on the quality of service rendered by the banks (Abdullrahim, 2010). Excellent service quality determines the customer's choice of bank, loyalty and the bank's ability to retain such customers. It is essential for the bank's profitability and sustainability to identify and maintain service quality strategies targeted at retaining customers, acknowledging customer's high expectation and service consciousness. Studies such as Nsiah and Mensah (2014), Kavita and Ravi (2017) and Njane (2013) were conducted to investigate service quality and customer retention in banking and other service sector within commercial banks, while researches conducted on Islamic banks about service quality, customer satisfaction, loyalty and retention include Lone and Rehman (2017), Alshurideh et al (2017), Shohrowardly et al (2016), Shariq et al (2016), Akhtar and

Zaheer (2014) and Gambo (2013). In all the above studies, attention has not been given to the mediating role of customer satisfaction in the relationship between service quality and customer retention. This is with particular reference to Nigeria Islamic banking space. This thus, establishes the need for testing the mediating effect of customer satisfaction on the relationship between service quality and customer retention in the context of non-interest banking industry in Nigeria. This study therefore, attempts to examine the mediating effect of customer satisfaction on the relationship between service quality and customer retention in Jaiz Bank Plc.

To this end, the study determines the effect of service quality on customer retention; the effect of service quality on customer satisfaction and the effect of customer satisfaction on customer retention in Jaiz Bank Plc in Kano Metropolis.

2. Review of Literature and Conceptual Issues

2.1 Service Quality

Service quality may be referred to as the services rendered that meet the customer's expectation and that is helpful in gaining and retaining the customer (Ijaz & Ali, 2013). This definition of Service quality seems very broad. A comprehensive definition of service quality by researchers is

the comparison between customer's perception of the service received and the customer's expectation of the service (Lehtinen, 1982; Zeithmal, 1988; Gronroos, 1988).

Parasuraman, Zeithaml and Berry (2004) affirmed that service quality is a function of the differences between expectation and performance along the quality dimension. Customer expectations are the viewpoints about a service that provide a standard by which service performance is appraised. Accordingly service quality is judged by customers, not the organizations that offer those services (Abedniya & Zaeim, 2011). According to Gambo (2013), service quality can be used as a competitive tool by banks to attract and sustain an enduring customer relationship while providing unique service differentiation.

The difference between customer expectations on service provided and perceived service is referred to as service quality and it is said to be satisfactory if the expectations are greater than performance (Ali & Zhou, 2013). Service quality is a function of perception and expectations; it is necessary to discover the gap between the customer expectations of quality services and customer's perceptions of the services rendered by an organization (Akhtar & Zaheer, 2014). This gap may be referred to

as the service quality gap (Tahir & Bakar, 2007). Furthermore, finding out the gaps between service quality standards and service quality performance is also very important in order to bridge such gaps. SERVQUAL model also known as the gap model was developed to measure customers' expectation and perceptions of service quality.

Service quality can therefore, be defined as the overall evaluation of customer's perception in comparison to customer's expectation of the service received. Parasuraman, Zeithaml and Berry (1985) developed the SERVQUAL instrument and laid down a framework for the measurement of service quality. The SERVQUAL instrument has become the most dominant instrument for measuring service quality. It originally comprised 10 dimensions with 97 items but later modified to 5 dimensions with 22 items in 1991. The five dimensions are reliability, responsiveness, assurance, empathy and tangibles.

Reliability is the ability to perform promised service dependably and accurately (Parasuraman et al., 1988, 1991). The determinants of reliability include minimal or error free transactions, fulfilling promises and providing feedback (Ali & Zhou, 2013). Responsiveness is the willingness to help customers and provide prompt services

(Parasuraman et al., 1988, 1991). This includes eliminating long queue in the banking hall and ability to provide alternatives and handle customers with professionalism in the event of system down time.

Assurance is knowledge of the employees and their ability to gain customer's trust and confidence (Parasuraman et al., 1988, 1991). This includes competence in the transaction processes, respect, politeness and attitude that show customers that they are important alongside proper communication and feedback (Ali & Zhou, 2013). Empathy is caring and individualized attention given to the customer (Parasuraman et al., 1988, 1991). Empathy is by being proactive in understanding the needs of the customer, accessibility and showing compassion. Tangible is the physical appearance of facilities, communication gadget, equipment and the personnel (Parasuraman et al., 1988, 1991). Tangibles include the cleanliness of the bank's ambiance, functionality of the processing equipment among other.

Relating this to Islamic banking, Muslims are sensitive about interest-based transaction of the conventional banks; therefore, making an additional dimension becomes necessary for measurement of service quality in Islamic banking industry. There was a need to modify or add compliance dimension to

the existing SERVQUAL model in order to bring out valid findings from researches in Islamic finance. Othman and Owen in 2001 developed a model which is based on the SERVQUAL model for Islamic banking system. An introduction of a new dimension to SERVQUAL five dimensions called “Compliance with Islamic Principal”. This dimension defines the company’s ability to fulfil Islamic law and operate under the principles of Islamic banking. Islamic laws and principles based operations, no involvement in interest, Islamic products and services and provision of profit sharing products (Akhtar & Zaheer, 2014).

About the application of CARTER model on Kuwait Finance House to measure the service quality, Othman and Owen (2001) found positive link between quality, satisfaction and services. Based on this conclusion, the CARTER model was developed to measure service quality in the banking industry with specific focus on Islamic banking. Thus, CARTER model includes a 34-item instrument that was customized for the Islamic banks; CARTER denotes Compliance, Assurance, Reliability, Tangibles, Empathy and Responsiveness. The model also has a wide acceptance because it is being used by a larger number of researchers within Islamic banking industry including Shohrowardhy, Alauddi and sharif (2016), Ab.aziz, Shukor and Wan

Abdullah (2014), Gambo, (2013) and Abedniya and Zaeim (2011). Researchers have continued to use the CARTER model, by particularly focusing on assessing, measuring and determining service quality and related variables. Based on this, it is appropriate to use it as the theoretical model to achieve the objectives of this study.

2.2 Customer Satisfaction

Customer satisfaction is one of the indispensable mechanisms of an organization’s strategy of retaining customer. Customer continuous relationship is the main source of sustainability and profitability of an organization. Cacioppo (2000) saw customer satisfaction as the feelings experienced by the customer when their expectations are met or exceeded what the product or service offered. This feeling leads to gaining the customer loyalty and repurchase intention. Therefore, customer satisfaction is considered as the principal component of marketing strategy of an organization. It measures the level to which products and services provided to customers meet the expectations of the customers (Saeed, et al., 2014).

The feeling will be established by the difference between the customer's expectations and the bank's performance. If the service received by the customer is the same level as his expectations, he will be

satisfied. If the service received is higher than the expectations, he will be delighted. If the level is lower than the expectations, the customer will be dissatisfied (Molae et al., 2013). Cacioppo (2000) viewed satisfaction from different facet of relationship between the bank and the customer: satisfaction with quality of product or service offered, satisfaction with the relationship between the customer and the organization, satisfaction with the price of the product or service and the satisfaction derived when the product or service meet or exceed customers' expectation.

Ukessay (2015) stated that the following five factors are the drivers of customer satisfaction: excellent service delivery, timeliness in fulfilling customer's request without tossing customer around, staff professionalism, which is a display of competent and fair treatment of customer and the willingness to go extra mile, feedback or accurate and comprehensive information about progress of customer's request, and finally, staff attitude, a show of friendliness, politeness and sympathy toward customers' needs.

Customer satisfaction thus, signifies the relationship between customer and service provider which brings about customer loyalty and provides an opportunity for a

long term relationship where customer expectations are met or surpassed.

2.3 Customer Retention

Customer retention is the process where customers continue to buy products and services within an established time frame. It is the activity that is put in place by a service provider to avert customer defections. Customer retention is more than giving the customer what they expect; it is about exceeding their expectation so that they become loyal advocates of the organisation's brands (Ibojo, 2015). Customer retention is very fundamental to the continuous survival of retail banking anywhere in the world (Abdullahi, Manaf, Yusuf, Ahsan & Azam, 2014). According to Zangmo, Liampreecha and Chemsriping (2015), customer retention can be defined as the attitude or feelings that propel a customer to continue their relationship with the service provider.

Gruber (2009) believed that customer satisfaction and customer retention are two main factors responsible for a long term success in an organization. He further enumerated the following as the benefits of customer retention: increase in repurchase behaviour, increase in cross selling, increase in the value of the customer, reduced price sensitiveness, positive word of mouth (referrals), reduced defection rates, reduced

costs of acquiring new customers and strengthened unique selling proposition (product differentiation). Creation of customer satisfaction and the creation of switching barriers are the main strategies employed by firms for retaining customers (Njane, 2013).

Customer retention refers therefore to the activities an organization undertake on the basis of reducing consumer's attrition rate while providing product and service that suit and lengthen the duration of the customer with the bank.

2.4 Customer Satisfactions as a Mediating Variable

Customer satisfaction is a business strategy that can lead to repeat purchase, which will in turn result in customer loyalty and customer retention. Satisfied customers stay with the bank longer, strengthen their relationship with the bank, show less price sensitivity and recommend the company's products or services to their acquaintances through a positive word of mouth (Mohammad, Yakubu, Bawuro, & Magaji, 2016).

Vast studies have demonstrated the mediating role of customer satisfaction; mostly between service quality and customer loyalty and also a number of researches between service quality and customer retention. Most of the relationship

showed a partial mediating effect. Osman and Sentosa's (2013) study revealed that customer satisfaction has significant influence and positive partial mediating effect on service quality and customer loyalty. Molae, et al, (2013) study showed that customer satisfaction is a mediator of the relationship between responsiveness, tangibility, reliability, and compliance with Islamic laws and loyalty. Saeed, Iqbal, Lodhi, Sami, Riaz, Munir and Mizna (2014) also confirmed that customer satisfaction plays a mediating role between the customer loyalty and service quality. Thus, the importance of customer satisfaction in services is undeniable.

2.5 Empirical Literature Review

2.5.1 Studies on Service Quality and Customer Retention

Ibojo (2015) carried out a research on the impact of customer satisfaction on customer retention in banks. The findings from descriptive and inferential analysis on 107 sampled customers of the bank showed the R^2 value of 0.717 which revealed that customer satisfaction independently accounts for 71.7% of the variation in customer retention. The f-statistics of 41.173 revealed that the model is statistically significant at 0.05 significant levels. It was concluded that the effective customer satisfaction lead to customer retention. More so, there is a significant relationship

between customer satisfaction and customer retention.

Furthermore, Zangmo, Liampreecha and Chemsripong (2015) conducted a research on the impact of service quality on customer retention in Airline Industry of Bhutan with a sample of 382 respondent of international flight of Drukhai Royal Airline. The result of the regression analysis showed that service quality has a positive significant relationship with customer retention. Njane (2013) conducted an investigation on factors affecting customer retention in Barclays Bank of Kenya on 16 customers of the bank. Content analysis revealed that customer retention is influenced by accuracy of transactions, delivery of services, efficiency of customer services, physical appearance of the bank and the convenience of the branch locations. Further findings indicated that customer retention in banks is also influenced by the corporate image of the banks based on the stability, familiarity and reliability. Competitive advantage of the bank through advertisements, unique and distinctive products and competitive pricing were other factors influencing customer retention.

2.5.2 Studies on Service Quality and Customer Satisfaction

Akhtar, et al., (2016) studied the impact of service quality, customer satisfaction and

loyalty programs on customer's loyalty. SPSS analysis on 100 respondents' results indicated that service quality, customer satisfaction, loyalty program can affect the customer loyalty and the bank can enhance loyalty of customer by providing their loyal customers with different kinds of rewards through loyalty programs. In a similar study also conducted in Malaysia, Osman, Mohamad and Mohamad (2015) whose study's objective was to form an understanding of the direct effect of service quality on customer loyalty, customer satisfaction on customer loyalty and bank image on customer loyalty relationship in Malaysia banking industry used the structural equation model (SEM) to demonstrate that service quality, customer satisfaction and image have significant and positive influence on customer loyalty in Malaysian commercial banking industry. The findings imply that the relationship of service quality, satisfaction and trust on customer loyalty lead to commercial banks' profitability.

Using the CARTER model, Dandis, Wright, Len and Cai, (2014) explored the impact of service quality and customer satisfaction on customer's loyalty in Jordan Islamic Bank (JIB). The findings from 78 customers using correlation analysis revealed that service quality dimensions impact significantly and positively upon customer satisfaction, and

customer satisfaction is positively related to customer loyalty in the Jordan Islamic Bank. Responsiveness demonstrated the highest positive correlation with customer satisfaction while reliability showed the least positive correlation with customer satisfaction.

Abdullahi, et al. (2014) explored the determinants of customer satisfaction on retail banks in New Zealand. An empirical analysis using structural equation modelling of 115 savings and current account holders revealed that the three factors determine customer satisfaction in retail banking and were found to be both practically and statistically significant. The implication is that the core, the enabling and the relational aspect of service quality must be taken care of by the banks to satisfy their customers in order to retain their loyalty.

Badara, Mat, Mujtaba, Al- Refai, Badara and Abubakar (2013) used AMOS 16 to analyze Structural Equation Modeling (SEM) in examining the direct effect of service quality dimension on customer satisfaction and customer loyalty on Nigerian Islamic bank. Convergent validation was performed using Confirmatory Factor Analysis (CFA) and composite reliability and sample size of 209

customers. The study revealed that responsiveness is a significant predictor of customer satisfaction and assurance is a significant predictor of customer loyalty. This implies that customers will be satisfied where the banks' staff are responsive and provide fast banking service. Additionally, to maintain loyal customers, Islamic banks should give assurance in terms of displaying courtesy and effective communication between the bank and the customers.

Abedniya and Zaeim (2011) measured the perceived service Quality in the Islamic Banking System in Malaysia. The analysis of 102 respondent found that the main criterion of Islamic banks' customer's satisfaction is based on the quality of service offered.

From the above literature reviewed on service quality, customer satisfaction and customer retention, the mediating role of customer satisfaction has not received adequate attention in the Nigerian context, especially in Islamic banking sector.

Research Model and Hypotheses

Based on the researches conducted using CARTER model, thus, it's appropriate for it to be used as the theoretical model as can be seen below and based of which relevant hypotheses were developed.

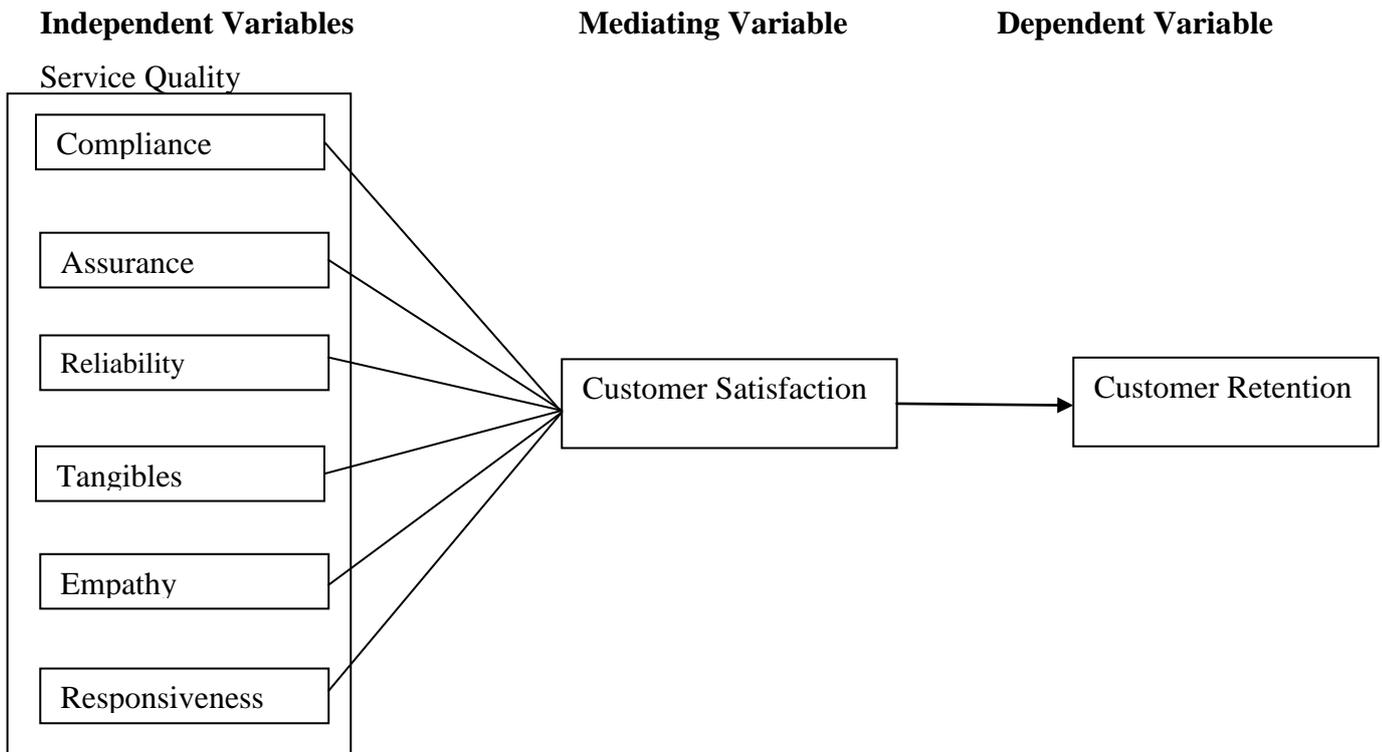


Figure 1: Theoretical Model of the Study

From the above theoretical framework, it can thus be hypothesised that:

H1= service quality has no positive significant effect on customer retention in Jaiz bank plc,

H2= service quality has no positive significant effect on customer satisfaction in Jaiz bank plc,

H3= customer satisfaction has no positive significant effect on customer retention in Jaiz Bank plc, and

H4= customer satisfaction mediates the effect of the relationship between service quality and customer retention in Jaiz Bank plc.

3 Research Methodology

3.1 Population and Sampling Design

The population of the study was made up of all the customers of the five branches of Jaiz Bank plc, Kano Metropolis, totalling 92,089 as at January 2018. The sample size used in the study was selected using Krejcie and Morgan’s (1970) table which stated that a population size of above 70,000 uses a sample size of 384. Due to unavailability of sampling frame, a non probability convenience sampling method was used and the primary data were obtained through questionnaire administered to the customers of Jaiz Bank plc in the five branches located in Kano metropolis.

A well-defined questionnaire was used as the main survey instrument of this research. The questionnaire was designed in a structured manner to enable it capture all the variables under study using a 5-point Likert scale with the range of 1 (strongly disagree) to 5 (strongly agree) for the measurement. Service quality was measured by 34-item of the CARTER model of Othman and Owen (2001). Customer retention was measured based on five items identified from the researches of Inkumsah (2013) and Caroline and Elizabeth (2014). Five items of customer satisfaction were adopted from Amin and Isa (2008), Ramdhani, Ramdhani and Kurniati (2011), Kishada and Wahab (2015).

Data Analysis was done using SPSS and AMOS. SPSS is a Statistical Package for Social Sciences was used to transform the variables and the descriptive statistics while AMOS is Analysis of Moment Structures, used for analyzing structural equation model (SEM) which tested the mediating effects of customer satisfaction.

4. Results and Discussion

4.1 Demographic Profile of the Respondents

Tafawa Balewa Way branch has the largest respondents with 145 (39.6%). It is discovered that majority of the respondents are male amounting to **280** (76.5%). Also, respondents aged 20-30 were the majority representing 166 (45.4%) and most of them have university degrees representing 152 (41%). The largest percent of respondents are salaried and self-employed persons with 138 (37.7%) and 134 (36.6%) respectively. In the entire population, 212 (57.9%) respondents earn below ₦50, 000 which represent majority of the respondents' earning. Further, up to 207 (56.6%) of the respondents are married, while 159 (43.4%) are single. Also, majority of the respondents operate savings account with 306 (83.6%), 57 (15.6%) respondents operate current account and the least group of respondents were 5 (0.5%) operate investment account. The findings show preference for savings account while investment account holders are customers who are often not present within the banking hall for daily transactions.

These findings are presented in detail in the table below.

Table 1: Demographic Characteristics of the Respondents in the Study.

Respondents' Branch	Frequency	Percent
Hotoro	16	4.4
Kabuga	38	10.4
Zoo Road	46	12.6
Bello Road	121	33.1
Tafawa Balewa Way	145	39.6
Total	366	100.0
Respondents' Gender	Frequency	Percent
Male	280	76.5
Female	86	23.5
Total	366	100.0
Respondents' Age	Frequency	Percent
20-30	166	45.4
31-40	127	34.7
41-50	67	18.3
Above 50	6	1.6
Total	366	100.0
Qualification	Frequency	Percent
No formal education	16	4.4
Below secondary school	9	2.5
Secondary school	90	24.6
University Degree	152	41.5
Above Bachelor degree (Master or PhD)	22	6.0
Other	77	21.0
Total	366	100.0
Occupation	Frequency	Percent
Salaried	138	37.7
Self employed	134	36.6
Student	76	20.8
Others	18	4.9
Total	366	100.0
Respondents' Income	Frequency	Percent
Below 50,000	212	57.9
50,000-100,000	89	24.3
Above 100,000	65	17.8
Total	366	100.0
Marital Status	Frequency	Percent
Married	207	56.6
Single	159	43.4
Total	366	100.0
Account Type	Frequency	Percent
Savings	306	83.6
Current	57	15.6
Others	5	.8
Total	366	100.0

Source: Field Survey, 2018.

4.2 Pre-Estimation Test

The study carried out the following pre-estimation test.

4.2.1 Reliability Test

To test the reliability of the measuring instrument, the study adopts the Cronbach’s

Alpha test, an instrument with a Cronbach’s Alpha of 0.7 or greater meets the reliability test and is fit to be used in a study. This means that such an instrument can produce consistent results in a repeated test.

Table 2: Reliability Statistics of the variables of the Study

Construct	No of items	Cronbach’s Alpha
Service Quality	34	0.753
Customer Satisfaction	5	0.825
Customer Retention	5	0.971

Source: Field Survey, 2018.

From the Table 2 above, Cronbach’s Alpha calculated from SPSS 20 showed that all items used to measure the study constructs meet this condition, hence, the study proceeded with the use of the instrument.

4.2.2 Test of Sample Adequacy

The analysis of SEM using Amos requires certain minimum sample. The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy and Bartlett’s test of sphericity measure whether a sample is appropriate to proceed with analysis and suggest whether an exploratory factor analysis should be performed.

Table 3: Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test for all Constructs

		Service Quality	Customer Satisfaction	Customer Retention
KMO	Measure of Sampling Adequacy.	.778	.805	.802
Bartlett’s Test of Sphericity	Approx. Chi-Square	2454.798	636.632	3893.365
	Df	465	10	10
	Sig.	0.000	0.000	0.000

Source: Field Survey, 2018.

Table 3 depicted the KMO test review sample adequacy for all constructs and the Bartlett's test of sphericity is significant. The study proceeds further with the Confirmatory Factor Analysis (CFA) given that the constructs are theoretically developed and have been tested across boards

theoretical framework, before proceeding with the estimation of the structural model. Validation of the measurement model follows the procedure of testing for uni-dimensionality (deleting of items with low factor loadings to improve model fit), validity and reliability of the measurement model (see Awang, 2012).

4.3 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis for the study is conducted by first assessing and validating the measurement model derived from the

4.3.1 Measurement Model

Figure 2 is the measurement model for all constructs involved in the study, as derived from our theoretical framework.

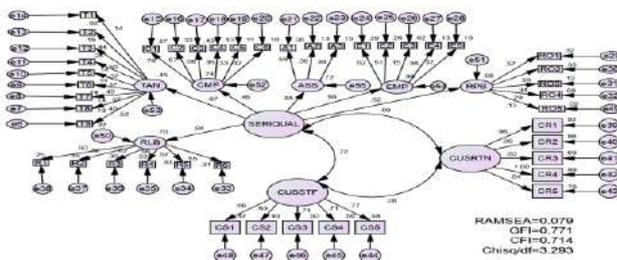


Figure 2 Measurement Model before Item Deletion.

Source: Field Survey, 2018.

From the Figure 2, service quality is a second order construct measured by 6 first order constructs (compliance, assurance, reliability, tangible, empathy and reliability), with 34 items in all. Customer retention and customer satisfaction are both measured by 5 items each.

Table 4: The Fitness Indexes for Measurement Model

Name of Category	Name of Index	Index Value	Comments
Absolute Fit	RMSEA	0.079	The Required Level is Achieved
Incremental Fit	GFI	0.771	The Required Level is Not Achieved
	CFI	0.714	The Required Level is Not Achieved
Parsimonious Fit	Chisq/df	3.293	The Required Level is Achieved

Source: Field Survey, 2018.

Table 4 above showed confirmatory factor analysis. The assessment (CFA) of the model is performed using AMOS to calculate the factor loadings and square multiple correlation (R^2) for all items in the model, and the strength of correlation between the constructs. The result indicates that the model can be improved as it

achieved two of the four indexes for assessment of the model fit.

4.3.2 Modified Measurement Model

To improve the model, the study performed the unidimensionality procedure by deleting three items with the lowest factor loadings, given the factors loading from Figure 2. After this deletion, the model achieved all needed fitness indexes.

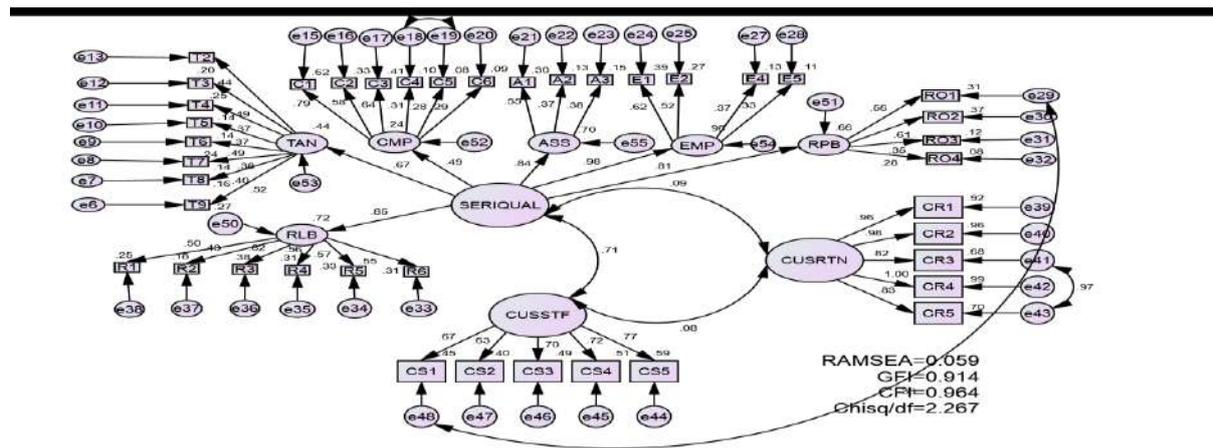


Figure 3: New Measurement Model after Deletion of three Items (RO5, T1 and E3

Source: Field Survey, 2018.

Figure 3 is the new measurement model. The model is seen to have achieved convergent validity, discriminant validity and reliability of the measurement constructs.

Table 5: The New Fitness Indexes for Measurement Model

Name of Category	Name of Index	Index Value	Comments
Absolute Fit	RMSEA	0.059	The Required Level is Achieved
	GFI	0.914	The Required Level is Achieved
Incremental Fit	CFI	0.964	The Required Level is Achieved
Parsimonious Fit	Chisq/df	2.267	The Required Level is Achieved

Source: Field Survey 2018.

Note: The fitness index has improved after the modification has taken place in the measurement model.

Table 5 showed that fitness index has improved after the modification has taken place in the measurement model. The tests for validity and reliability have also been achieved respectively.

Table 6: The Measurement Model Results for Each Construct (After Modification)

Second Order Construct	First Order Construct	Item	Factor Loading	Cronbach's Alpha (Above 0.70)	C.R. (Above 0.60)	AVE (Above or equal 0.50)
Service quality	Compliance	CMP	0.49	0.822	0.868	0.533
	Assurance	ASS	0.84			
	Reliability	RLB	0.85			
	Tangibles	TAN	0.67			
	Empathy	EMP	0.98			
	Responsiveness	RPB	0.81			
Customer Satisfaction		CS1	0.669	0.825	0.845	0.501
		CS2	0.632			
		CS3	0.702			
		CS4	0.717			
		CS5	0.768			
Customer Retention		CR1	0.960	0.971	0.885	0.607
		CR2	0.981			
		CR3	0.823			
		CR4	0.997			
		CR5	0.834			

Source: Field Survey, 2018.

Table 6 above showed that with the modification of the model, internal reliability and composite reliability have been met with the Cronbach's Alpha greater than 0.7 and CR above 0.60 for all constructs, respectively. In addition, the condition for convergent validity is not violated with the value of AVE being at least 0.5.

Similarly, Figure 4 showed the model does not suffer from discriminant validity (cross loading) problem, as the correlation between the exogenous constructs (service quality

and customer satisfaction) is below 0.85 (0.71).

4.3.3 The Assessment of Normality for the Data

Table 6 in the appendix showed the normality test for the data of the study. The value of the Kurtosis should not exceed 8 in absolute value and that of the skewness should not be greater than 1 in absolute terms (Awang, 2012b) a value not greater than 2 can however, be accepted (Shengyi, Patricia & Robert, 2008).

4.3.4 Structural Model and Test of Hypotheses

The structural model is presented as FigureS 4.3 and 4.4. Also, Figure 4 showed the standardized estimates, while Figure 5 showed the regression estimates in their normal form (unstandardized).

4.3.4.1 Squared Multiple Correlation (R^2) Squared Multiple Correlation (R^2)

This measure the extent of the variance in the dependent variable (Customer Retention) explained by the predictor variable (service quality and customer satisfaction) of the model.

Table 7: The Squared Multiple Correlation (R^2)

Variable	Estimate (R^2)
Customer Retention	0.81

Source: Field Survey, 2018.

Table 7 showed that service quality and customer satisfaction explain 81 percent of the variance in customer retention. That is, the error variance of customer retention is 19 percent, approximately.

4.3.4.2 Regression Weight for Every Path Estimates

The regression weights for every path estimates and their significance level as extracted from Figure 4.3 is presented in Table 4.16.

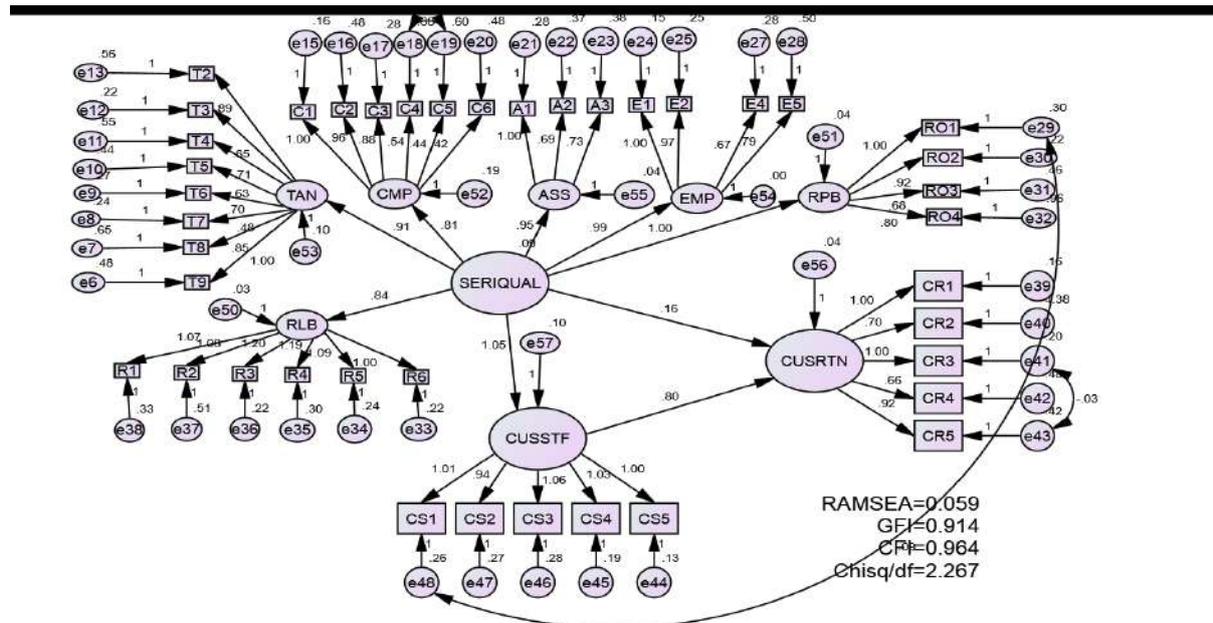


Figure 4: Regression Weights for Structural Model

Source: Field Survey, 2018.

Table 8: The Regression Weights for Every Path Estimate and Its Significance

			Estimate	SE	CR	P-Value	Result
Customer Satisfaction	<---	Service Quality	1.045	0.136	7.659	***	Significant
Customer Retention	<---	Service Quality	0.156	0.120	1.301	0.193	Not Significant
Customer Retention	<---	Customer Satisfaction	.803	.096	8.389	***	Significant

Source: Field Survey 2018

Note *** showed high significance at <0.001, SE= Standard Error of estimate

CR=Critical Ratio

4.3.4.3 Hypotheses Testing

Table 8 above showed that the regression weights extracted from Figure 4 which presented the path (arrow) and its coefficients in bold, it indicated how much the effects of independent variable on the mediating variable, independent variable on dependent variable and mediating variable on dependent variable respectively.

The path coefficient of service quality to customer retention is 0.156. This value indicates that for every unit increase in service quality; its effect would contribute an insignificant 0.156 unit increases in customer retention. And the effect of service quality on customer retention is insignificant (p<0.193). Thus, hypothesis H₁ that service quality has no positive and significant effect on customer retention in Jaiz Bank Plc is supported.

The path coefficient of service quality to customer satisfaction is 1.045. This value

shows that for every unit increase in service quality; its effect would contribute 1.045 unit increases in customer satisfaction. And more importantly, the effect of service quality on customer satisfaction is significant (p<0.001). Thus, the hypothesis H₂ that service quality has no positive and significant effect on customer satisfaction in Jaiz Bank Plc is not supported.

The path coefficient of customer satisfaction to customer retention is 0.803. This value portrays that for every unit increase in customer satisfaction; its effect would contribute 0.803 unit increases in customer retention. The effect of service quality on customer retention is significant (p<0.001). Thus, the hypothesis H₃ that customer satisfaction has no positive and significant effect on customer retention in Jaiz Bank plc is not supported.

4.3.4.4 Test for Mediation

To test for the mediating effect of customer satisfaction in the relation between service quality and customer retention, the study utilized the standardised regression coefficients as suggested by Awang (2012). According to Awang (2012), if the

coefficient of the indirect effect in the model is greater than the direct effect, mediation occurs. In addition, if in this, the direct effect is significant, a partial mediation occurs. Otherwise, the result is a complete mediation.

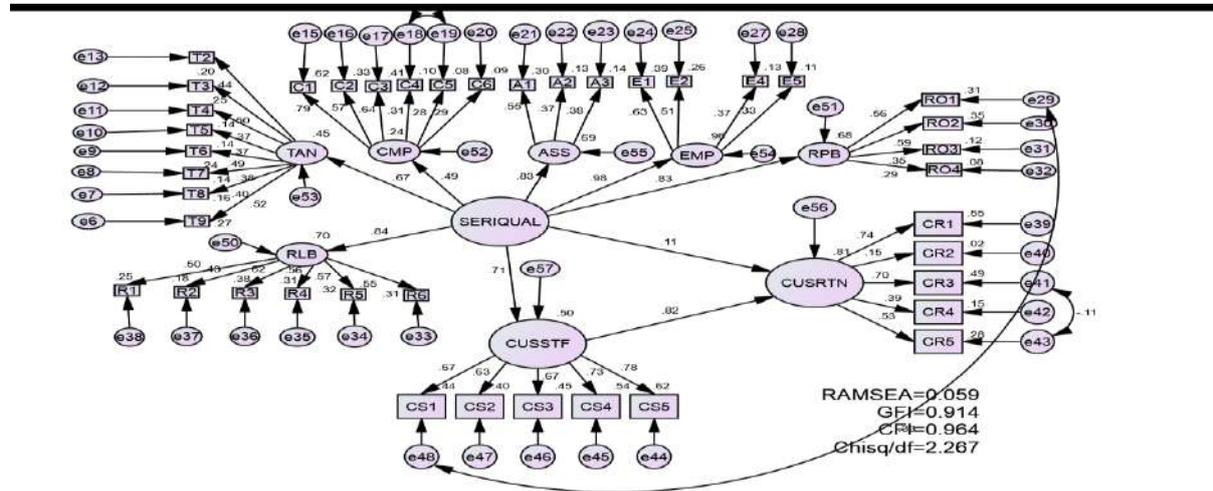


Figure 5: Standardized Regression Weights for Structural Model

Source: Field Survey, 2018.

Note that the indirect effect is defined as the multiplicative value of the path coefficient from the independent variable (service quality) to the mediator variable (customer satisfaction) and that between the mediator

variable (customer satisfaction) to the dependent variable (customer retention). The results are presented in Table 9, extracted from Figure 5.

Table 9: Test for Mediation

			Estimate	P-Value	Result
Customer Satisfaction	<---	Service Quality	0.711	***	Significant
Customer Retention	<---	Service Quality	0.108	0.193	Not Significant
Customer Retention	<---	Customer Satisfaction	0.818	***	Significant

Source: Field Survey 2018

Note *** showed high significance at <0.001

Table 9 above presented the path (arrow) and its coefficients in bold. This indicates

the indirect effect of the mediating variable on independent variable and the dependent

variable. The indirect effect is 0.582 (0.711*0818) which is higher than the direct effect of 0.108. Thus, this shows that customer satisfaction mediates the effect of service quality on customer retention. As such, the mediation effect is a complete one, while the direct effect of service quality on customer retention is not significant but the indirect effect of service quality on customer retention through the mediator customer satisfaction is significant. Thus, the hypothesis H₄ which stated that customer satisfaction mediates the effect of the relationship between service quality and customer retention in Jaiz Bank plc is supported.

4.4. Discussion of Findings

The study examined the mediating effect of customer satisfaction on the relationship between service quality and customer retention using the five branches of Jaiz bank plc located in Kano metropolis. The result from the first hypothesis indicated that service quality dimensions (compliance, assurance, reliability, tangibles, empathy and responsiveness) lead to customer satisfaction as an increase in service quality will significantly increase customer satisfaction by approximately 100 percent. This finding is similar to the results discovered in studies such as Lone and Rehman (2017), Hamzah et al., (2015), Dandis et al., (2014), Abdullahi et al.,

(2014), Badara et al., (2013) and Qureshi, Khan and Zaman (2012).

Similarly, on the second hypothesis on how customer satisfaction influences customer retention, the finding indicated that an increase in the bank's customer satisfaction increases significantly its customer retention by approximately 80 percent. This portrays that customers of Jaiz Bank will continue to bank with it as long as they are satisfied with the services rendered by the bank. This finding is supported by report from studies of Bashir (2017), Ibojo (2015) and Inkumsah (2013).

The result from the third hypothesis on how customer satisfaction mediates the relationship between service quality and customer retention showed a 58 percent indirect effect of the mediating role of customer satisfaction as a direct effect between service quality and customer retention only revealed a 16 percent effect. Interestingly, structure equation modeling (SEM) analyzed using AMOS resulted in a full mediation while studies such as Awan and Azhar (2014), Srivasta and Rai (2013) and Osman and Sentosa (2013) used other methods of data analysis such as ordinary least square and reported a partial mediation effect.

The value of R² is 0.81 which indicated that service quality and customer satisfaction

explain 81 percent of the variance in customer retention. This is also similar to the research by Ibojo (2015) where he reported R^2 value of 0.717 which indicated that customer satisfaction account for 71.7% of the variation in customer retention.

5. Conclusion and Recommendations

5.1 Conclusion

Based on the findings of the study, the following conclusions were drawn. Firstly, service quality has a weak direct effect on customer retention but it has significant direct effect on customer satisfaction. Secondly, a combination of service quality and customer satisfaction leads to customer retention, which means customer satisfaction mediates the relationship between service quality and customer retention and finally, customer satisfaction has a significant effect on customer retention in Jaiz bank plc Kano metropolis.

5.2 Recommendations

The following are recommendations made from the findings of the study.

- i. Jaiz bank should continue to improve on their service quality as the study has shown that service quality has significant positive effect on customer satisfaction. This may include but not limited to service quality unit with a mandate to review all items of the service quality

dimensions (compliance, assurance, reliability, tangibles, empathy and responsiveness) and measure service compliance by codification of service items with minimal turnaround time for tracking and monitoring purposes.

- ii. The study also showed that an increase in customer satisfaction will lead to an increase in customer retention. The bank should conduct periodic and regular customer feedback on service experienced such as calling the customer and using mystery shopper to enquire customer's experience.
- iii. Service quality showed a weak effect on customer retention which implies that customer satisfaction is an antecedent to customer retention. The bank should be interested and make deliberate effort in swift responses to customer complaints and aim towards becoming the best customer oriented bank in Nigeria so as to retain the existing customers.
- iv. The study has shown that customer satisfaction mediates the relationship between service quality and customer retention. One of the major drivers of service in the bank is the staff as they serve as an interface between the bank and the customers. Staff appraisal should therefore

objectively reflect performance, based on defined and measurable service indicators.

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Appendix

Table Showing Normality Test

Variable	min	Max	Skew	c.r.	kurtosis	c.r.
CS1	1	5	-1.284	-10.032	0.65	1.252
CS2	1	5	-1.027	-8.024	1.622	0.238
CS3	2	5	-0.976	-7.619	1.59	1.208
CS4	1	5	-1.201	-9.38	1.603	1.977
CS5	1	5	-0.93	-7.267	0.957	1.358
CR5	1	5	-1.02	-7.964	0.72	2.813
CR4	1	5	-1.046	-8.169	0.72	2.81
CR3	1	5	-0.995	-7.768	0.597	2.331
CR2	1	5	-1.046	-8.173	0.677	2.644
CR1	1	5	-0.819	-6.399	0.066	0.258
R1	1	5	-1.631	-12.736	0.796	2.54
R2	1	5	-1.151	-8.987	0.31	3.022
R3	1	5	-0.713	-5.57	0.916	1.386
R4	1	5	-0.577	-4.506	1.296	5.061
R5	1	5	-1.361	-10.633	0.837	0.603
R6	1	5	-0.34	-2.656	2.396	9.356
RO4	1	5	-0.196	-1.53	-1.205	-4.704
RO3	1	5	0.506	3.956	0.644	2.515
RO2	1	5	-1.031	-8.053	1.849	1.937
RO1	1	5	-1.332	-10.405	1.64	1.119
E5	1	5	-0.59	-4.605	0.541	2.113
E4	1	5	-1.163	-9.081	1.055	5.835
E2	1	5	-0.919	-7.18	1.665	8.217
E1	1	5	-0.37	-2.891	1.203	2.317
A3	1	5	-0.636	-4.971	1.49	5.821
A2	1	5	-1.774	-13.858	1.094	7.702
A1	1	5	-0.767	-5.992	0.807	1.961
C6	1	5	-1.308	-10.216	1.722	4.535
C5	1	5	0.224	1.75	-0.33	-1.291
C4	1	5	-0.183	-1.427	-0.201	-0.786
C3	1	5	-1.105	-8.633	1.303	8.992
C2	1	5	-1.547	-12.081	1.323	2.976
C1	1	5	-1.297	-10.132	1.237	6.545
T2	1	5	-0.928	-7.248	0.782	3.052
T3	1	5	-0.423	-3.305	1.221	2.577
T4	1	5	-0.564	-4.404	0.423	1.651
T5	1	5	0.804	6.276	1.747	6.82
T6	1	5	-1.317	-10.282	1.273	2.591
T7	1	5	-0.982	-7.667	1.675	2.163
T8	1	5	-0.685	-5.352	0.21	0.82
T9	1	5	-1.02	-7.964	0.971	3.792
Multivariate					734.689	118.351

Impact of Accounting Measure of Performance on Dividend Payout Ratio of Listed Manufacturing Companies in Nigeria

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Abstract

This paper examined the effect of accounting measure of Performance on Dividend Payout Ratio of listed manufacturing companies in Nigeria. Accounting measures of performance proxied by Return on Asset (ROA), Return on Equity (ROE), Return on Investment (ROI) and Net Profit Margin (NPM) were used as independent variables while dividend payout ratio (DPO) of listed manufacturing firms in Nigeria represented dependent variable. The study adopted ex post facto research design and analyzed a total of 63 manufacturing firms who were able to pay dividend within the study period. Simple random probability was employed for the selection of sample size from each group of the manufacturing subsector whereas multiple regressions was used in order to establish the nature and degree of the relationship between the variables under consideration. The study found a positively significant relationship between return on assets (ROA), return on equity (ROE), return on investment (ROI), and net profit margin (NPM). Therefore, it was recommended among others that management of listed manufacturing firms in Nigeria should try to improve their performance by ensuring that the companies invest in projects that would yield positive return in order to attract more investors. It was also recommended that policy makers should consider granting the manufacturing firms tax relief and other aids in order to improve their performance and consequently attract investments to the sector which benefit the economy in several ways.

Keyword: Accounting Performance; Return on Asset, Return on Equity, Return on Investment, Net Profit Margin and Dividend Payout Ratio.

1. Introduction

The most fundamental and acceptable objective of modern corporate organizations is to maximize the wealth of shareholders and this can be achieved through any of these three major goals: investment decisions, financial decisions and the aspect of dividend policy.

Linter (1956), who was the first to recognize the information content of dividends, established that managers, in their efforts to make dividend policy decisions generally looked at the earning of the current period to target level of dividend payout to be paid to shareholders. Dividend policy is company's guiding documents on dividend measurement and payment. However, dividend policy of a company can be

measured using two common approaches: dividend yield and dividend payout. Changes in these two financial measures provide information signals in relation to risks concerning the firms as well as future growth earnings of the firms.

Companies listed on the stock market are expected to pay dividend which is paid out of the company's earnings and this reduces the amount of retained earnings that could be used for internal financing by the firm. Companies are expected to evaluate dividend in the view of maximizing the shareholders wealth which may include market price of the shares and the current dividend. Companies may design ways either to retain or distribute all earnings depending on the assurance of having viable investment opportunities in the future. However, in a situation where investments yield negative returns, dividends are increased and the share price falls. Dividend policy is used in targeting a particular payout ratio. Dividend as a residual in line with some other school of thoughts believing that dividend payout is a function of financing decision that managers have to decide whether to pay or not. In such case, if they decide to pay dividend, they would face a further question of how much they should pay for that year (Uwuigbe, 2013).

Statistics revealed that the performance of the Nigerian manufacturing sector has consistently declined from N8.89 trillion at the end of December, 2015 to N6.50 trillion at the end of December 2021. The contribution of the sector stood at 6% against the expected 15% despite allocation of 48% foreign exchange earning to the sector (National Bureau of Statistics, 2021). Thus, managements of these companies have to look critically inward the issue of dividend payout ratio. This is because it can attract more investors to the sector and revive the performance issues the sector has faced for a long time. Dividend policy, in the context of this study relates to firms' dividend payout ratio that managers adopt in deciding the pattern and size of cash distribution to shareholders over time. Hence, it is the decision of managements about the portion of income that is given to shareholders in the form of dividend (Hussaini, 2016).

Dividend policy is one of the research areas that always attract attention of financial analysts, researchers, investors and other stakeholders. However, dividend policy controversy is one of the ten major unsolved problems of corporate finance which deserves more attention in order to increase understanding of the subject (Bulla, 2013). Therefore, this controversy necessitates research in the area as it affects the

manufacturing sector of the Nigerian economy. Dividend policy, in the context of this study, relates to firm's dividend payout ratio that managers adopt in deciding the pattern and size of cash distribution to shareholders over time.

Many studies have examined the relationship between dividend policy and firm performance (Oyinlola, Oyinlola & Adeniran, 2014; Oyinlola & Ajeigbe, 2014; Onanjiri & Korankye, 2014; Murekefu & Ouma, 2012). However, most of the studies have only considered the impact of dividend policy on firm performance despite the fact that the relationship is a two-way phenomenon since dividend policy affects firm performance, just as firm performance is consequential on dividend policy decision (Rafindadi & Bello, 2019; Kimunduu, Mwagi, Kaijage & Ochieng, 2017; Anwaar, 2016; Giang & Tuan, 2016; Koduk, 2016; Pascareno & Siringoringo, 2016). Furthermore, past studies have not used market measures of firm performance which are one of the fundamental measures of financial performance (Santos & Brito, 2013). Instead, they mostly focused on accounting measures of firm performance such as; return on asset, return on equity, return on investment, net profit margin, return on capital employed (Azeez & Latifat, 2015; Oyinlola & Ajeigbe, 2014; Murekefu & Ouma, 2012).

Firm financial performance is a subjective measure of the accountability of an entity for the results of its policies, operations and activities quantified for an identified period in financial terms (Van Horne, 2008). It can be measured through various financial measures such as financial ratios return on assets (ROA), return on equity (ROE), return on investment (ROI), earnings per share (EPS), net profit after tax (NPAT) and any market value ratio that is generally accepted.

Profit after tax has been widely used as measures of firm's performance and it's the most widely used. Financial performance of firms is usually expressed as a function of internal and external determinants. The internal determinants originate from books of accounts (balance sheets and/or profit and loss accounts) and therefore, could be termed as industry-specific determinants of performance. However, external determinants are variables that are not related to firm's management but reflect the economic and legal environment that affect the operation and performance of firms.

Firm performance determines the dividend paid out to its shareholders. The greater the amount of earnings generated by a firm as a result of good performance, the higher the amount of dividend payout, which in turn boost the stock price of the company in the

stock market (Wasike & Jagongo, 2015; Bunyasi 2012; Jensen, 2010). Financial performance of firms also serves as one of the means by which they are rated, it is also used to measure the success or otherwise of the operations of the firm. There are several ways to evaluate firm performance but the most commonly used method is ratio which covers a number of concepts and can also be grouped into profitability, liquidity, leverage, activity and investment ratios (Kurfi, 2021).

It is against this background that this study examines the extent to which accounting measure of performance determines dividend payout ratio of listed manufacturing companies in Nigeria so as to ascertain the effects of these measures on dividend payout ratio of the companies under review. Accounting performance is measured by Return on Asset (ROA), Return on Equity (ROE), Return on Investment (ROI) and Net Profit Margin (NPM), while dependent variable was represented by Dividend payout ratio (DPO). The study would be significant to the management of Nigeria listed manufacturing companies, investors, regulators as well as the general public. At the same time, the study would fill the existing gap of literature in the area. As such, the paper is structured as follows: 1 Introduction; 2 Empirical Review; 3

Theoretical Framework; 4 Methodology; 5 Results and Discussions; and 6 Conclusions and Recommendations.

2. Literature Review

Kimunduu, Mwagi, Kaijage and Ochieng (2017) examined the relationship between financial performance and dividend policy of firms listed at the Nairobi Securities Exchange under insignificant hypothetical view that was tested against a sample size of 31 firms selected using purposive sampling technique. The study found that there was a statistically significant direct association between return on equity and dividend policy. This implied that as firm profitability improves; a corresponding proportionate change in dividend payout ratio is initiated by management. In addition, it was established that there was a statistically significant positive linkage between operating cash flows and dividend policy which denotes that as cash flow levels from operating activities changes, dividend payout ratio changes in the same direction leading to increased distribution of cash dividend to investors. Again, a statistically significant direct connection between price earnings and dividend policy was established. This relationship showed that an increase in share market value positively prompts an increased in dividend payout ratio whereby managements follow a more acceptable dividend policy by the

shareholders. However, market to book value depicted a weak insignificant inverse relationship with dividend policy and was dropped. In general, the study concluded that the link between financial performance and dividend policy of firms listed at the Nairobi Securities Exchange was significant. The gap in this study was that the conclusions were based solely on the hypothetical relationships of the various variables as revealed by the study outcome. In the Nigerian context however, other factors such as legal provisions and liquidity also affect dividend decision and this makes the research outcome spurious.

Rafindadi and Bello (2019) investigated the effect of firm performance and dividend policy of 21 listed financial companies in Nigeria for a period of 20 years (1997-2016). Secondary data was obtained and used for analysis. The independent variables were ROA, ROE, MVA and Tobin's Q. while the dependent variable was dividend payout. Hausman tests were conducted to choose between fixed effect and random effect, and fixed and pooled OLS respectively as well as Wald test was employed for testing normality of data. The outcome from the regression result revealed that all the independent variables significantly affect dividend payout ratio of the sampled companies. The study concluded that that performance affects

dividend decisions in both short and long runs. As such, managers of these companies should sustain effective utilization of their assets and should also strive to increase the value of their equity by investing larger portion of their earnings into profitable ventures.

There are several shortcomings from Rafindadi and Bello (2019). First, study was under sampled because it selected only 21 out of the total population of 57 companies. This is far below the suggested sample as portrayed by Krejcie and Morgan's (1970) table. Second, several contradictory statements were found in the study. For instance, the study stated that performance affects dividend payout both in the short and long run while in another part it revealed that performance does not affect dividend payout in the long run. Also, the study quoted 1997 to 2016 as its 20 years instead of 19 years study period. In another part, the study was presented as a 5 year research. Additionally, the study revealed that due to existing policy of dividend payment in the industry, firms pay dividend even when they make loss. This was supported by the skewed mean value revealed by the descriptive statistics. It also disproved the power of performance to influence dividend payment. All these contradictions cast doubt in the mind of readers as to whether the study can be adequately relied upon when it

comes to judging the relationship between performance and dividend policy of firms.

Pascareno and Siringoringo (2016) analyzed the effect of financial performance on company's value moderated by dividend policy. The variables of the study consisted financial performance, dividend policy and company's value. Financial performance was measured by liquidity, leverage, and profitability, while dividend policy was represented by dividend payout ratio and company's value was proxied by Tobin's Q. Data were filtered from annual financial report of 18 insurances and banking companies. These 18 companies were listed in Indonesia Stock Exchange during the period 2010-2013. Data were analyzed using multiple regression analysis. There was evidence that financial performance did not affect the dividend payout and company's value. It was also shown that dividend policy did not moderate the effect of financial performance on company's value. The study revealed that there was no long-run relationship between variables of the study. Based on the findings of the study both banking and insurance industries, which were listed on Indonesia Stock Exchange, were able to pay dividend continuously during the period of the study, neither financial performance did influence company's value nor did dividend policy moderate the relationship between financial

performance and company's value. In addition, the study combined both banking sector as well as insurance companies as its population. This could lead to the outcome of the result to be mixed as seen earlier in the study. Also, the research ought to have concentrated on at least one of the sectors as its domain for it to be more focused in one particular aspect.

Anwaar (2016) investigated the impact of firm performance on stock returns of Listed Companies of the Financial Times Stock Exchange (FTSE) 100 Index London, over the period 2005 to 2014. The study adopted five independent variables and one dependent variable. Earnings per share, quick ratio, return on assets, return on equity and net profit margin were used as independent variables while stock returns was used as dependent variable. Panel regression analysis method was used for analysis of data. The findings indicated that net profit margin, return on assets have significant positive impact on stock returns while earnings per share has significant negative impact on stock returns. When earnings per share increases, then all those investors who want short term gain and are conscious of dividend, sell their stock in the market due to the fact that in the near future, the stock returns of the company will decrease due to excess supply of stocks, while return on equity and quick ratio show

insignificant impact on stock returns. The study failed to conduct robustness tests to determine the best model to be used in interpreting the results outcome between the pooled OLS and fixed effect model by conducting the Breusch and Pagan Langragian Multiplier test (LM) which would have improved the statistical inference of the study.

Koduk (2016) determined the relationship between financial performance and dividend payout of savings and credit cooperative societies registered by SACCO society regulatory authority in Kenya. Data were obtained from secondary source and a sample of 164 firms was collected for the period of five years from 2011 to 2015. The data were analyzed using descriptive statistics as well as inferential statistics for making conclusions from the data. Correlation and regression analysis were used in determining the relationship between the variables. The findings of the study indicated that there exists a positive relationship between financial performance and dividend payout of registered Sacco's firms and negative relationship also was shown by growth variable. The study recommended that firms should pay dividends based on their financial performance and this entails coming up with a good management strategy and effective dividend policy. The study assumed that

firms always utilize all their income in paying dividend by using Net Income as a measure of Dividend payout which contradicts practical situations. Firms sometimes pay residual dividend and, in some cases, choose to reinvest entire earnings.

Uwuike (2013) investigated the nature of linkage between financial performance and dividend policy of listed firms at the Nigerian Stock Exchange. The objective of the study was to examine the effects of financial performance, firm size, financial leverage and board independence on dividend payout ratio of firms listed at the Nigerian Stock Exchange. Purposive sampling technique was used to select a sample size of fifty (50) firms for the study. The financial records for the period between 2006 and 2011 were used to collect the relevant data. Regression methodology was used for data analysis and the results established that the association between firm size, board independence, financial performance and dividend payout ratio was proportional and statistically significant for firms listed at the Nigerian Stock Market. However, the study ought to have conducted robustness tests such as normality test, multicollinearity test and autocorrelation test in order to improve its statistical inferences.

Kajola, Adewumi and Oworu (2015) investigated the linkage between financial performance and dividend payout ratio of nonfinancial firms registered on the Nigerian Stock Exchange. A sample size of twenty-five (25) firms was selected for the study and secondary data were collected for a period of ten years, from 2004 to 2013. Both panel data and pooled ordinary least squares regression models were employed to establish the coefficient of predictor and the control variables respectively. Profitability was used as the predictor variable and it was measured using rate of return on assets whereas dependent variable was dividend policy which was measured using the dividend payout ratio. The findings of the result concluded that there was a direct and significant relationship between profitability and dividend policy. The gap of the study was in its methodology as the selected population was very small, the study used only one dependent variable and one independent variable with three control variables. This indicates that there are more control variables than independent variable. However the more the independent variables the better the results of that study. Furthermore, the study was a panel data because OLS was used in results' interpretation. Thus, further tests such as heteroscedasticity test, fixed and random effect test and hausman specification would

have been conducted in order to decide on the best model that suits the study.

Yusuf (2015) examined the impact of performance and dividend payout ratio of some selected deposit money banks in Nigeria covering the periods between 2004 and 2013. The study adopted explanatory research design of which four deposit money banks were selected and data relating to the relevant variables of leverage and profitability as independent variables and dividend payout ratio as dependent variable were collected. Multiple regressions and correlation analysis were employed to analyze the data. The findings revealed that leverage has negative and insignificant impact on dividend payout ratio. The result of profitability of the firm was negatively and significantly influencing dividend payout of some selected deposit money banks in Nigeria in the study, with an indication that profitability and dividend payout of the banks move in an inverse direction. That is, the higher the profit earned by the bank, the lesser the dividend declared by the selected banks to the shareholders.

The study employed four samples as its population as well as three variables which are dividend payout ratio, return on equity and leverage. However, the samples of the study were small and the variables can

described as inadequate. This is because the more the sample size and variables the better the result of the study. The study failed to capture on the normality of the data and multicollinearity of the variables in order to improve on the study statistical inferences.

Dita and Murtaqi (2014) studied the relationship between net profit margin, price to book value, debt-equity ratios and stock returns in the Indonesian consumer goods industry during the period 2009-2013. According to the results of multiple linear regression analysis, net profit margin, price to book value, and debt equity ratio have a significant relationship between stock returns. The result of the study revealed that, net profit margin and debt to equity ratio have a positive effect, while the price to book value has a statistically significant negative relationship with stocks returns. The study population was made of twenty and the technique for the selection of sample size or criteria employed was completely not included in the study as this will improve on the statistical result of the study, the study did not make provision for recommendations.

Allozi and Obeidat (2016) investigated the relationship between profitability and leverage measures with stock returns in Amman stock Exchange. The sample included 65 manufacturing companies over

the period 2001-2011. The study employed net profit margin, gross profit margin, return on assets, and return on equity and earnings per share as profitability and debt ratio, debt to equity ratio and interest coverage ratio as leverage ratios. The results of the study revealed that gross profit margin, return on equity, return on assets and earnings per share have significant relationship with stock returns and net profit margin and leverage measures are irrelevant with stock returns. As it can be deduced, the study was conducted on the entire population because sample size and the criteria used to arrive at the size were not explicitly explained. Also, there was no theory to which the study was underpinned. And all these could significantly affect statistical inferences arrived at.

Several dividend theories supported the prepositions on dividend payment. These theories are often used to explain the relationship between dividend payment, performance and value of firms as previously used in the works of (Kimunduu, Mwagi, Kaijage & Ochieng, 2017). Notwithstanding, the existence of theories like M&M hypothesis (1961) that proposed dividend irrelevance, a lot of more recent theories have proved the existence of positive relationship between firm performance and dividend payout.

Bird-in-Hand Theory

Bird in hand theory proposes that a relationship exists between firm value and dividend payout. It states that dividends are less risky than capital gains since dividends are more certain. Therefore, investors would prefer dividends to capital gains (Amidu, 2007). Because dividends are supposedly less risky than capital gains, firms should set a high dividend payout ratio and offer a high dividend yield to maximize stock price. The essence of the bird-in-the-hand theory of dividend policy (Fumey and Doku, 2013) argued that outside shareholders prefer a higher dividend policy. Consequently, investors would be more attracted to firms with high payout ratio.

Signaling Theory

According to the signaling hypothesis, investors can infer information about a firm's performance and future earnings through the signal coming from dividend announcements, both in terms of the stability of dividend and changes in dividend. However, for this hypothesis to hold, managers should first have possessed private information about a firm's prospects, and have incentives to convey this information to the market (Modugu, 2017). A firm with poor performance should not send false signals to the market by increasing dividend payments. Thus, the market must be able to rely on the signals to

differentiate among firms. If these conditions are fulfilled, the market would react favorably to the announcements of dividend increase and unfavorably otherwise (Hosain, 2016).

It has been empirically established that when dividends are increased or initiated, prices of the associated common stocks tend to go up, and when dividends are cut or omitted, prices fall (Kimunduu et al, 2017; Yusuf, 2016; Nwidobie, 2013). Uwuigbe (2013) argued that firms tend to increased dividend when managers believed that profitability has permanently increased. This suggested that dividend increase imply long-run sustainable earnings. Many theorists contended that the rise in the stock price following a dividend increase conveys positive information, that is, managers use dividends to signal their views of future earnings prospects which signify how well firms have been performing. The idea that changes in dividends have information content about the future performance of firm remains the perceived wisdom in corporate finance (Odawo & Ntoiti, 2015). Furthermore, this provides the evidence of relationship that exists between firm performance and dividend policy of listed manufacturing companies.

This study is underpinned by signaling theory of dividend payment. The

justification of the choice of the theory is based on the fact that it addresses some of the issues of dividend payout to investors of the company and also addresses the issue of cash and stable payout of firms as a result of good profit earned from performance. As well, signaling theory deals with company performance as managers communicate information about the performance of company to outside investors on how well the company is performing.

Hypotheses statements

In line with the specific objectives and the reviewed literature, the study has developed the following null hypotheses:

HO1: return on asset has no significant impact on dividend payout among listed manufacturing companies,

Ho2: return on equity has no significant impact on dividend payout among listed manufacturing companies,

Ho3: return on investment has no significant impact on dividend payout among the listed manufacturing companies, and

Ho4: net profit margin has no significant effect on dividend payout among the listed manufacturing companies.

Conceptual Framework

In line with the signaling theory, this paper comes up with the framework on the relationship about the effect of accounting measure of performance on dividend payout ratio of listed manufacturing companies. The conceptual framework is a pictorial representation of the relationship between the variables as presented below.

IV: Accounting Performance

DV: Dividend Payout Ratio



Figure 1: Conceptual Framework

Source: (Researcher, 2022)

4. Methodology

Population and Sample Size of the Study

The population of the study comprised all the seventy-four (74) manufacturing companies listed on the Nigeria Stock Exchange as at 31st December, 2020. The listed firms are classified under different

segments namely: consumer goods sector (27), industrial goods sector (20), health care sector (11), conglomerate sector (6), agricultural sector (5) and natural resources sector (5).

The study adopted cluster sampling as sampling technique because the population of the study involves grouping the firms into manufacturing subsectors. These firms constitute the following: twenty-seven (27) consumer goods sector, twenty (20) industrial goods sector, eleven (11) health care sector, six (6) conglomerate sector, five (5) agricultural sector and five (5) natural resources sector. Simple random probability was employed for the selection of sample size from each group of manufacturing subsector proportionately. Hence, a total of 63 firms forms the adjusted population of the study based on the criteria that firms that were able to pay dividend consistently within the period of the study. The composition of the sample sizes are consumer goods sector ($27 - 2 = 25$); industrial goods sector ($20 - 3 = 17$); health

care ($11 - 2 = 9$); conglomerates sector ($6 - 2 = 4$); agricultural sector ($5 - 1 = 4$) and natural resources ($5 - 1 = 4$). Therefore, 11 companies were dropped out of the total 74 companies, while the remaining 63 firms served as adjusted samples of the study. This implied that a total of two firms were dropped out of the twenty seven in the consumer goods sector, while three firms were dropped out of twenty in the industrial goods sector, two firms were dropped in the health care sector out of a total of eleven firms, while in the conglomerate sector two firms were equally dropped out of six, in the agricultural sector one firm was dropped out of five firms and in the natural resources sector one firm was dropped out of five firms as explain above. The selection is presented in Table 3.1 as follows:

Table 3.1: Proportionate Distribution of Sample Size

SN	SECTOR	NO	Sample	Proportion%
1	Consumer goods	27	25	36
2	Industrial goods	20	17	27
3	Health care	11	9	15
4	Conglomerate	6	4	8
5	Agriculture	5	4	7
6	Natural resource	5	4	7
7	Total	74	63	100

Source: (Researcher, 2022)

Result and Discussion

This section of the study discusses the result obtain from the regression model. This includes presentation and discussion of descriptive statistics, correlation matrix and finally the summary of the regression result.

Descriptive statistics

This sub-section presents and describes the nature of the variables data using descriptive statistics.

Table 1: Descriptive Statistics

Variables	Mean	Std. Dev	Min	Max
DPO	0.5092	0.2098	0.0848	0.9976
ROA	0.3889	0.2049	0.0108	0.9743
ROE	0.4083	0.2045	0.0313	0.9377
ROI	0.3686	0.1914	0.0811	0.8270
NPM	0.5032	0.1814	0.1136	0.9484

Source: STATA 11

Table 1 showed that the measure of dividend payout (DPO) of manufacturing firms listed in Nigeria has a mean value of 0.5092 with standard deviation of 0.2098, and minimum and maximum values of 0.0848 and 0.9976 respectively. The table indicated an average return on asset (ROA) of 0.3889 with standard deviation of 0.2049; the minimum and maximum values were 0.0108 and 0.9743 respectively. The table also indicated an average return on equity (ROE) of 0.4083 with standard deviation of 0.2045; the minimum and maximum values were represented by 0.0313 and 0.9377 respectively. Moreover, Table 1 also showed

an average return on investment (ROI) of 0.3686 with standard deviation of 0.1914, the minimum and maximum values were 0.0811 and 0.8270 respectively. Lastly, the results in Table 1 above indicated that the net profit margin (NPM) has a mean value of 0.5032 with standard deviation of 0.1814, with minimum and maximum values of 0.1136 and 0.9484 respectively.

Correlation matrix

This section presents and discusses the extent of variables relationship within and between them. Table 2 below presents the correlation matrix result.

Variables	DPO	ROA	ROE	ROI	NPM	VIF	T-Value
DPO	1.0000						
ROA	0.4572	1.0000				1.5400	0.6507
ROE	0.3320	0.3252	1.0000			1.2100	0.8298
ROI	0.4312	0.5715	0.3809	1.0000		1.6400	0.6092
NPM	0.3277	0.2944	0.2274	0.3360	1.0000	1.1600	0.8633

Source: STATA 11

The results in Table 2 showed the degree of association between dividend payout (DPO) and all pairs of independent variables individually as well as between independent variables themselves and cumulatively with the dependent variable (DPO) of the study in the listed manufacturing firms in Nigeria. The table presented a positive relation between dividend payout (DPO) and all other independent variables (return on asset, return on equity, return on investment and net profit margin), which was to the tune of 0.4572, 0.3320, 0.4312 and 0.3277 respectively. This relationship implied that as the proportion of these independent variables increases; the dependent variable (DPO) also increases positively.

The analysis of the relationships within the independent variables and themselves indicated positive relationship all through.

Table 2 above also presented the result of the Multicollinearity Test where it revealed that all the VIF's were consistently less than 10 and tolerance value also less 1 which implied that multicollinearity is not a problem (Cassey & Anderson, 1999).

However, to conclude on the relationship and the impact of the dependent variable (DPO) and all the pairs of independent variables (return on asset, return on equity, return on investment and net profit margin) of listed manufacturing firms in Nigeria, the estimators from the regression of the model of the study is analyzed in the following section.

Summary of regression result

This section presents the summary of the regression result which is presented in Table 3 below:

Table 3: Summary of the Regression Result

Variables	Coefficients	t-values	p-values
ROA	0.4099	4.6800	0.0000
ROE	0.1947	2.2700	0.0240
ROI	0.2771	2.8600	0.0050
NPM	0.3004	3.2600	0.0010
Constant	0.0330	0.6200	0.5370
R-Square			0.5955
F-Statistics			32.9700
F-Significance			0.0000
Hetttest	638.3500		0.0000
Hausman	19.1900		0.0007
Serial Correlation	1.6880		0.2636

Source: STATA 11

However, the result obtained from the heteroscedasticity test is significant from the probability value of 0.0000 (see Table 3) above which indicated that the panel elements were not homoscedastic for that they were heterogeneous which necessitated the test for fixed and random effect.

In addition, the result obtained from the Hausman specification test conducted indicated that the probability value was significant (see Table 3) above which suggested the use and subsequent interpretation of the fixed effect model in favor of the random effect.

Furthermore, the result obtained from the Woodridge serial correlation test revealed a probability value of 0.2636 which was insignificant and suggested the subsequent reporting and interpretation of the fixed effect model. For that reason, the fixed

effect result model was presented and interpreted in Table 3 above.

The cumulative R^2 (0.5955) which is the multiple coefficients of determination gives the proportion or percentage of the total variation in the dependent variable as explained by the independent variables jointly. Hence, it signified that 60 percent of total variation in dividend payout (DPO) of listed manufacturing firms in Nigerian was caused by the collective effort (interaction) of return on asset, return on equity, return on investment and net profit margin. This result further indicated that the model is fit.

The F which represents the Fisher's statistics (F-statistics) of 32.9700 which is significant at 1 percent indicated that dividend payout model is fit. In addition, it also implied that for any change in performance measures used in this study, the dividend payout

ability of these manufacturing firms would be directly affected.

The regression result revealed that return on asset (ROA) has a t-value of 4.6800 with regression coefficient of 0.4099 which was statistically significant at 1 percent level. This implied that return on asset has significant effect on the dividend payout of listed manufacturing firms in Nigeria. However, the result is not surprising because the prior expectation was that return on asset as a performance measure of a firm would definitely translate in the dividend payout ratio of firms. Similarly, in reality, return on asset mostly affects firms share price in the capital market positively and in turn affect dividend payout. However, this finding gives evidence to reject the first null hypothesis of the study which says; there is no significant effect between return on asset and dividend payout of listed manufacturing firms in Nigeria. Thus, hypothesis one (1) is rejected.

The regression result in Table 3 above revealed that return on equity has a t-value of 2.2700 and a coefficient beta value of 0.1947 with a significant p-value of 0.020. This signified that return on equity (ROE) has a positive, significant and statistical impact on the dividend payout of listed manufacturing firms in Nigeria. This indicated that for every 1 percent increase in

the profit earned as a result of the equity invested listed manufacturing firms; the dividend payout increase by 0.1947. Furthermore, the profit earned measured using ROE by manufacturing firms listed in Nigeria indicated the likely chances of paying high dividend by these firms. This result is not surprising as it did not contradict researchers' expectation that majority of the shareholders invested in a firm with a hope of achieving return on their investment which is mostly the dividend. However, the findings from this result serve as sufficient evidence for rejecting hypothesis two of this study. Thus, hypothesis two (2) is hereby rejected.

The regression result in Table 3 revealed that return on investment (ROI) has a t-value of 2.8600, coefficient value of 0.2771 which is statistically significant at 1 percent level as proved by the probability value of 0.000. This signifies that return on investment (ROI) is positively, strongly and statistically influencing dividend payout in manufacturing firms listed in Nigeria. This implies that for every 1 percent increase in the return on investment (ROI) of manufacturing firms listed in Nigeria, the dividend payout also increase significantly by 0.2771. However, this finding serves as evidence for rejecting hypothesis three (3) of the study, thus; hypothesis three is rejected.

In addition, the result of net profit margin (NPM) revealed a t-value of 3.2600 and a beta value of 0.0330 with a p-value of 0.0000. This signifies that net profit margin also is a factor that increases dividend payout in listed manufacturing firms in Nigeria. This result is consistent with the study priory expectations that net profit margin as a performance indicator also influence dividend payment positively in manufacturing firms listed in Nigeria. Hence, this finding provides sufficient reasons of rejecting the fourth null hypothesis of the study. Hence, the fourth null hypothesis which states that net profit margin has no significant effect on dividend payout of listed manufacturing firms in Nigeria is hereby rejected. Thus; hypothesis four (4) is rejected.

5. Conclusions and Recommendations

Based on the discovered findings, the study concludes as follows:

Firstly, the study has provided empirical evidence on the utility of four independent variables of performance in explaining and predicting dividend pay-out of manufacturing firms listed in Nigeria. It was provided by the findings of this study that all the independent variables utilized in this study proved to have an encouraging role in the way and manner dividend is been paid in listed manufacturing firms in Nigeria.

However, based on the above findings and conclusions, it is recommended that managers of manufacturing firms listed in Nigeria should consider a way of improving all the accounting performance measures used in this study, since they were found to have reasonably improved the ability of the firms in paying dividend out to their shareholders.

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APPENDIX

. sum dpo roa roe roi npm

Variable	Obs	Mean	Std. Dev.	Min	Max
dpo	315	.5346322	.3710115	.08475	4.59091
roa	315	.398439	.2504942	.0108	2.67416
roe	315	.4178088	.2278954	.0313	2.11064
roi	315	.374923	.2324174	.081062	2.737
npm	315	.509564	.209421	.113647	2.36544

. correlate dpo roa roe roi npm
(obs=315)

	dpo	roa	roe	roi	npm
dpo	1.0000				
roa	0.4572	1.0000			
roe	0.3320	0.3252	1.0000		
roi	0.4312	0.5715	0.3809	1.0000	
npm	0.3277	0.2944	0.2274	0.3360	1.0000

. reg dpo roa roe roi npm

Source	SS	df	MS	Number of obs =	315
Model	12.761856	4	3.190464	F(4, 310) =	32.47
Residual	30.4601002	310	.098258388	Prob > F =	0.0000
Total	43.2219563	314	.137649542	R-squared =	0.2953
				Adj R-squared =	0.2862
				Root MSE =	.31346

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dpo					
roa	.3936772	.0875461	4.50	0.000	.2214174 .565937
roe	.2349609	.0852109	2.76	0.006	.0672961 .4026258
roi	.2726646	.0975118	2.80	0.005	.080796 .4645332
npm	.282059	.0909108	3.10	0.002	.1031787 .4609393
_cons	.0336518	.0530867	0.63	0.527	-.0708042 .1381077

. vif

Variable	VIF	1/VIF
roi	1.64	0.609240
roa	1.54	0.650685
roe	1.21	0.829810
npm	1.16	0.863313
Mean VIF	1.39	

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
 Ho: Constant variance
 Variables: fitted values of dpo
 chi2(1) = 638.35
 Prob > chi2 = 0.0000

. xtreg dpo roa roe roi npm,fe

Fixed-effects (within) regression
 Group variable: year
 Number of obs = 315
 Number of groups = 7
 R-sq: within = 0.3025
 between = 0.5955
 overall = 0.2947
 Obs per group: min = 2
 avg = 45.0
 max = 63
 F(4,304) = 32.97
 Prob > F = 0.0000
 corr(u_i, xb) = -0.0229

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dpo					
roa	.4098749	.087538	4.68	0.000	.2376179 .582132
roe	.1947124	.0857264	2.27	0.024	.0260201 .3634047
roi	.2771496	.0970234	2.86	0.005	.0862272 .468072
npm	.3004428	.0922541	3.26	0.001	.1189053 .4819803
_cons	.0329649	.0533158	0.62	0.537	-.0719499 .1378796
sigma_u	.21478477				
sigma_e	.31073517				
rho	.32330836				(fraction of variance due to u_i)

F test that all u_i=0: F(6, 304) = 1.91 Prob > F = 0.0788

```
. xtreg dpo roa roe roi npm, re
Random-effects GLS regression           Number of obs   =   315
Group variable: year                   Number of groups =    7
R-sq:  within = 0.3019                  Obs per group:  min =    2
      between = 0.5819                    avg =          45.0
      overall  = 0.2953                    max =          63
corr(u_i, X) = 0 (assumed)              Wald chi2(4)    =  129.88
                                          Prob > chi2     =   0.0000
```

dpo	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
roa	.3936772	.0875461	4.50	0.000	.2220899	.5652644
roe	.2349609	.0852109	2.76	0.006	.0679507	.4019712
roi	.2726646	.0975118	2.80	0.005	.0815451	.4637842
npm	.282059	.0909108	3.10	0.002	.103877	.460241
_cons	.0336518	.0530867	0.63	0.526	-.0703963	.1376999
sigma_u	0					
sigma_e	.31073517					
rho	0	(fraction of variance due to u_i)				

```
. hausman fe re
```

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
roa	.4098749	.3936772	.0161977	.
roe	.1947124	.2349609	-.0402485	.0093875
roi	.2771496	.2726646	.004485	.
npm	.3004428	.282059	.0183838	.0156857

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
 = 19.19
 Prob>chi2 = 0.0007
 (V_b-V_B is not positive definite)

```
. xtserial dpo roa roe roi npm
```

wooldridge test for autocorrelation in panel data

H0: no first-order autocorrelation
 F(1, 4) = 1.688
 Prob > F = 0.2636

```
. xtpcse dpo roa roe roi npm, hetonly
```

Linear regression, heteroskedastic panels corrected standard errors

```
Group variable: year           Number of obs   =   315
Time variable:  id            Number of groups =    7
Panels:         heteroskedastic (unbalanced)  Obs per group:  min =    2
Autocorrelation: no autocorrelation          avg =          45
                                          max =          63
Estimated covariances = 7              R-squared      =   0.2953
Estimated autocorrelations = 0          Wald chi2(4)   =   77.99
Estimated coefficients = 5              Prob > chi2    =   0.0000
```

dpo	Coef.	Het-corrected Std. Err.	z	P> z	[95% Conf. Interval]	
roa	.3936772	.089266	4.41	0.000	.218719	.5686353
roe	.2349609	.085058	2.76	0.006	.0682504	.4016715
roi	.2726646	.0967998	2.82	0.005	.0829405	.4623887
npm	.282059	.0916866	3.08	0.002	.1023565	.4617615
_cons	.0336518	.0638869	0.53	0.598	-.0915643	.1588678

Moderating the Role of Entrepreneurship Education on the Relationship between Perceived Access to Finance and Entrepreneurial Intentions among Undergraduate Students in Kaduna State University

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Abstract

Extant literature on access to financial resources and entrepreneurial intentions have produced a mixed result, but whether entrepreneurship education moderate this relationship remain un-researched. Consequently, this study sought to explore the moderating role of entrepreneurship education on the relationship between perceived access to finance and entrepreneurial intentions among students in Nigeria. The study involved the distribution of 220 questionnaires among undergraduate students in the faculty of management science who are studying entrepreneurship and other business related courses. Using PLS-SEM technique for data analysis, the study findings revealed that perceived access to finance has the capacity to influence the entrepreneurial intentions of the selected students. Moreover, the findings revealed that entrepreneurship education plays a significantly direct and moderating role between perceived access to finance and students' entrepreneurial intentions. The study therefore, recommends that entrepreneurship education should be enhanced as it was proved to be a powerful motivator for promoting entrepreneurship intentions and access to finance among students.

Keywords: Entrepreneurial Intention, Perceived Access to Finance, Entrepreneurship Education

1. Introduction

Graduate youth unemployment is a condition that translates unintentional idleness among higher education graduates who are actively seeking for paid jobs, but cannot find any under the prevailing nature of the economy (Educational Research Network for West and Central Africa ERNWACA, 2021). Developed nations are worried about the persistent rise of unemployment rate among citizens, hence, the nascent economies' major concern is job creation and this issue can potentially be overcome through promoting and encouraging entrepreneurial activities

(CrecenteRomero, Gimenez-Baldazo, & Rivera-Galicia, 2018). Although, youth unemployment remains the major problem faced by most economies in the world, it has become endemic and more worrisome in the developing economies. In Nigeria for example, the National Bureau of Statistics (NBS) (2020) revealed that in the fourth quarter? of 2019, youth unemployment rate in Nigeria increased to 42.1 percent. This statistics revealed that Nigeria is yet to fully explore its abundant natural and human resources. It therefore becomes very imperative for every country especially developing nations to improve their level of

entrepreneurship as it helps in reducing mass unemployment and alleviating poverty level. Like any other developing nations across the globe, Nigeria needs to enhance its economic activities through the promotion of entrepreneurship.

Entrepreneurship is widely recognized as a pillar of every economy in the world, as it is a major driver of job creation, innovation, wealth creation, economic growth and development (Afolabi, 2015; Aberman, 2016). Entrepreneurship is the means not only for providing jobs for young people but also for creating jobs to especially young people through their new ventures (Holienka, Pilkova & Jancovicova, 2016). Entrepreneurship is also viewed not only as a remedy for rising unemployment but also as an alternative to traditional forms of employment (Eurofound, 2016). It is equally believed that youth entrepreneurship can have a social purpose by instilling hope for the future and counteracting the development of social unrest. Also, entrepreneurship activities create income opportunities, mitigate the phenomenon of migration which is seen in conditions of low income and uncertain economic prospects in home countries (London School of Economics L.S.E, 2018). However, Global Entrepreneurship Research Association GERA, 2018) revealed that entrepreneurship activities in developing nations did not give

much emphasis on job creation thereby creating jobs for others but rather job seekers. It is important to understand therefore that entrepreneurial activities are influenced by intentions.

Krueger, Reilly and Carsrud, (2019) described that entrepreneurial activity can be predicted more accurately by studying intention. Entrepreneurial Intention (EI) has emerged as one of the important variable in entrepreneurship studies over the last couple of decades (Zhang, Wong & Soh, 2019) and is becoming a rapidly progressing arena of study (Swarupa & Goyal, 2020). EI expresses an individual's desire and commitment to creating a new venture. The decision to follow entrepreneurial carrier is an intentional act because intentions are developed long before creating a new venture (Aviram, 2010). Schlaegel and Koenig, (2013) opined that entrepreneurial intention is important to understanding entrepreneurship because it serves as the starting point in the process of learning, generating and developing entrepreneurial opportunity. In an attempt to find out the possible causes of unemployment among graduates, it was discovered that undergraduate students have low intention in choosing a career in entrepreneurship (Jimoh, 2021; Wongnaa & Seyram, 2014). It is imperative therefore to understand the theory of planned behavior as it helps us to

identify factors that develop individual's entrepreneurial intention.

Theory of planned behavior (TPB) has been used to explain the factors that govern an individual's entrepreneurial intention to participate in entrepreneurial activities. TPB explained the role of intentions in predicting behavior and clarified how an individual's intention to start a business venture is aroused by making use of the three motivational and enabling factors. The theory described intentions using three variables; attitude toward behavior, perceived behavioral control and subjective norms. It is widely theorized that the three variables can significantly predict an individual's behavior. However, other researches have explored entrepreneurial intention from various angles to identify the determinants of entrepreneurial intentions. One of such determinant is the students' perceived access to finance.

Previous studies (CBN report, 2021; Nguyen, 2020; Valentina & Angela, 2019; Arranza, & Fdez, 2018; Aslam & Hasnu, 2016; Engelschion, 2014; Fatoki, 2014; Neneh, 2014) revealed that inadequate financing remains the major impediment to creating new ventures among many intending youths. While a number of youth graduates are willing to start a new venture (Padiaychee, 2016), this is not always

realizable as a result of lack of start-up capital. Banks and other financial institutions are always reluctant to release funds to potential entrepreneurs owing to the deficient ownership of assets and lack of collateral amongst many intending youths (Aslam & Hasnu, 2016). Moreover, they are unwilling to risk their funds in financing new ventures at their early stage of life circle due to uncertainty attached to cash flows streams associated with a new business venture (De la Torre, Soledad, Peria & Schmukler, 2017).

Similarly, other researchers have revealed a positive association between access to finance and entrepreneurial intention (Douglas, Olumide, Roberts & Charles, 2022; Nguyen, 2020; Valentina & Angela, 2019; Luc, 2018; Nengomasha, 2018; Sultan 2017; Arranza, & Fdez, 2018; Engelschion 2014; Aslam & Hasnu, 2016). It is logical therefore to presume that, the more one is able to access funds for new business, the more the business intention would be intensified and vice versa. However, other studies have found no significantly direct effect or weak relationship between access to finance and entrepreneurial intention (Priandhita & Edlyn, 2020; Berhanu, 2020; Alexander, 2016; Mwatsika, 2015; Sharma, 2014). As a result, there is a need to increase our understanding on the direct and indirect

effect of access to finance on students' entrepreneurial intention.

Given the contradictory findings in the literature on the effect of perceived access to finance on entrepreneurial intention and whether entrepreneurship education moderate the relationship between them or not is an under-researched area at least in Nigerian context. It is believed that the ability to find start-up capital and its effective utilization for enhanced entrepreneurial intention is contingent on the skills and education of the intending student. Hence, this study attempts to bridge this gap by investigating the moderating role of entrepreneurship education on the relationship between perceived access to finance and students' entrepreneurial intentions.

2. Literature Review

2.1 Entrepreneurial Intention (EI)

The concept of entrepreneurial intention has been receiving increasing attention in recent years as a result of its importance in predicting entrepreneurial behavior (Nabi, Linan, Fayolle & Krueger, 2017; Linan & Fayolle, 2015). Many researchers have attempted to explain why some people, and not others, decided to become entrepreneurs (Chou, Chien-Hua, Hsi-Chi, & Su-Chang, 2017; Padilla-Angulo, 2017). Entrepreneurial intention expresses an

individual's interest and inclination to involve into entrepreneurial activities towards creating a new venture (Salami, 2019). Mba (2018) explained that the intention is a predictor to measure the extent to which an individual desire to involve in new venture creation. Entrepreneurial intention also refers to a conscious awareness and conviction by an individual that intends to establish a new business venture and plan to do so (Nabi, 2017). This definition suggests that entrepreneurship arises from a deliberately planned behavior, therefore, it is imperative to understand this process and its motivations. The cognitive approach provides a useful point of view for analyzing the phenomenon of entrepreneurship through the study of perceptions and intentions. Thus, the theory of planned behavior suggests that it is the intention of an individual that causes them to develop a planned action-in this regard, to develop his own entrepreneurial activities (Ajzen, 1991).

2.2 Perceived Access to Finance (PAF)

The perception of access to finance is defined as an assessment of the individual's ability to effectively find, access and utilize capital (Pham, 2019). There is a much consensus that access to financial resources is an important determinant of entrepreneurship (Anton & Bostan, 2017). Moreover, studies have highlighted that

perceived access to finance is an important antecedent of entrepreneurial intentions (Charles, 2022; Nguyen, 2020; Douglas, Olumide, Roberts & Valentina & Angela, 2019; Nengomasha, 2018; Sultan, 2017; Arranza & Fdez, 2018; Luc, 2018). This implies that access to financial resources significantly affects an individual's intention to start a new venture. However, inadequate financial resources is also a huge impediment to the establishment of entrepreneurial activity (Neneh, 2016; Adomako & Danso, 2014). This means that lack of access to finance is a major hindrance to the growth of an individual's entrepreneurial intentions (Rahaman, 2011). The success of a venture depends on the proprietors' ability to generate internal and external sources of finance (Aminu & Shariff, 2014; Demir & Caglayan, 2012).

2.3 Entrepreneurship Education (EE)

Entrepreneurship education (EE) involves imparting concepts, skills and mind-sets necessary for successful business venture creation and ownership (Young, 1997). EE has been identified as a strong determinant of entrepreneurship intentions of students in university context which is expected to affect a students' carrier choice and development (Hassan, Lashari, & Basit, 2021; Doan & Phan, 2020; Saraih, & Ali, 2019; Otache, 2019; Pouratashi, 2014; Roxas, 2014). Engaging the teaming

unemployed youth graduate in entrepreneurial activities and encouraging students in the higher institutions of learning to consider entrepreneurship as a carrier option would therefore, go a long way in reducing the current over dependence on government jobs in Nigeria. As a result, Nigerian government had introduced a compulsory education course for all students in the tertiary institutions regardless of the area of specialisation. By undergoing formal entrepreneurial education training, it is expected that students would acquire knowledge and skills necessary to take on the challenges of setting up one's own business (Roxas, Cayoca-Panizales & Jesus, 2008). Hence, the motive behind this initiative was to inspire positive attitudes and intention towards entrepreneurship among students (Aja-Okorie & Adali, 2013).

2.4 Access to Finance and Entrepreneurial Intention

A number of studies have established a link between access to finance and entrepreneurial intention (Douglas, Olumide, Roberts & Charles, 2022; Nguyen, 2020; Valentina & Angela, 2019; Luc, 2018; Nengomasha, 2018; Sultan, 2017; Arranza, & Fdez, 2018; Engelschion 2014). Valentina and Angela (2019) formulated a hypothesis to identify the influence of access to financial resources on entrepreneurial intentions of 150 students in the faculty of

Economics and Business Administration from one of the largest universities of Romania. The findings from the survey analysis showed a high level of entrepreneurial intentions among the interviewed students. Moreover, the results revealed that access to financial resources is the most important obstacle identified by the students with entrepreneurial intentions. Douglas et al., (2022) investigated the factors influencing youth entrepreneurial ability and their effects on entrepreneurial intentions of 347 university students in Botswana. The data collected was analyzed through structural equation modelling (PLS-SEM). The result of the study established that perceived access to finance positively influence entrepreneurial intentions through entrepreneurial ability. Nguyen (2020) explored the impact of access to finance and environmental factors on entrepreneurial intention and a mediatory role of entrepreneurial behavioral control. A cross-sectional quantitative research was conducted using structural equation modelling technique for data analysis with a sample consisting of 635 students in 11 universities in Vietnam. The findings of the study revealed that access to finance influence entrepreneurial intention through entrepreneurial behavioral control. Arranza, and Fdez, (2018) examined entrepreneurial intentions in undergraduate students and the obstacles perceived by the students in the

process of establishing their own business venture. The survey was conducted on 1053 undergraduate students in the Andalusian public universities. Structural model was used in the analysis and findings from the regression analysis revealed that financial obstacle is one of the major barriers students perceived to starting their own business. Nengomasha (2018) developed a hypothesis to determine the role of entrepreneurial self-efficacy on the relationship between perceived access to finance and entrepreneurial intentions of students at the University of Free State, South Africa. Using SPSS for data analysis, the result revealed that perceived access to finance and entrepreneurial self-efficacy both have a significant relationship with entrepreneurial intention. Similarly, Aslam and Hasnu (2016), who conducted a research on MBA graduating students' entrepreneurship intention in Pakistan discovered that lack of financial resources, serve as the major factor preventing them from actualizing their goal.

On the contrary, Priandhita and Edlyn (2020) developed a hypothesis to investigate the position of financial access and tax policy in boosting the entrepreneurial intentions and entrepreneurial actions of students in the University of Brawijaya Malang, Indonesia. A model was proposed and empirically tested on a sample of 125 university students. The hypothesis model

was evaluated with path analysis and? Multiple linear regressions. The result of the analysis established that access to finance does not have significant effects on the entrepreneurial intention and entrepreneurial behavior of students. Berhanu (2020) formulated a hypothesis to examine factors which determine the entrepreneurial intentions of the students towards self-employment. A survey was conducted on 93 graduating class students of Business and non-Business field of specialization of the Arba Minch University. Inferential statistics was used to analyze the data, and findings showed that access to financial resources among other factors have a negative effect on entrepreneurial intention of the graduating class students. Based on these therefore, it is imperative to investigate the effect of access to finance on entrepreneurial intention among Nigerian students.

2.5 Entrepreneurship Education and Entrepreneurial Intention

Empirical studies have indicated positive influence of entrepreneurship education in enhancing students' EI. For instance, Mei, Lee, & Xiang (2020) explored the influence of entrepreneurship education on students' entrepreneurial intention. Using data from a survey on students in China, and multiple regression analysis to examine the relationships among the variables, the study found that students in different types of

institutions and different major fields had a varying levels of engagement in entrepreneurship education. Findings revealed that the higher the level of entrepreneurship education students received, the stronger their self-efficacy of entrepreneurial decision-making, and the stronger their entrepreneurial intention . Doan and Phan (2020) developed a hypothesis to investigate the effect of entrepreneurship education on entrepreneurial intention of students in the northern Vietnam. The study was conducted on 688 students from both economic and technical university in the northern region of Vietnam. The study data was collected using SPSS 22 and Smart PLS 3.00 software. Findings showed that entrepreneurship education has a strong influence on the entrepreneurial intention of students in the northern Vietnam. Saifullahi (2020) assessed the influence of entrepreneurial education (EE) and entrepreneurial attitude (EA) on the entrepreneurial intention (EI) of graduating students in a Nigerian university. Quantitative survey method was employed on 157 final year students across the different faculties of Bayero University, Kano. Partial Least Square Structural Equation Modelling (PLS-SEM) was employed. Findings from the analysis revealed that entrepreneurship education and entrepreneurial attitude have a strong influence on the entrepreneurial intentions

of graduating students. Saraih, and Ali (2019) who conducted an empirical research to explore the effect of entrepreneurship education and entrepreneurial implementation on entrepreneurial intention among students from the higher institutions in the northern Malaysia. A quantitative survey method was employed and the research received 96.7% responses out of the 500 students selected as a study sample size. The statistical package for social science (SPSS) version 22 was used for the statistical analysis. Findings reported that there was a significant effect of entrepreneurship education and entrepreneurial intention. The study of Cai and Kong (2017) investigated the impact of entrepreneurship education on entrepreneurial intention among Fuzhou University students. The researchers used a stratified random sampling method to select respondents from six (6) different majors resulting in a sample size of 274. Findings in the study revealed that entrepreneurship education impact positively on entrepreneurial intention of students.

In a study conducted by Pedrini, Langella and Molteni (2017) to explore the impact of entrepreneurial education on the antecedents of the entrepreneurial intention in Ghana. The study was conducted on 30 participants using an explanatory approach with a mixed-methods of quasi-experimental

design featuring pre and post-testing. Findings revealed that educational background is highly relevant to entrepreneurial intention. Otache (2019) examined the effect of entrepreneurship education on entrepreneurial intention among students in Nigeria. The study adopted a quantitative approach to study 256 Higher National Diploma 2 students of the Federal Polytechnic, Idah, Nigeria. Partial least square structural equation modelling (PLS-SEM) was used for data analysis. Findings reported a significant relationship between entrepreneurial education and students' entrepreneurial intention through model one of the study which indicated a significant and positive influence between the dependent and independent variables.

2.6 Moderating Role of EE on the relationship between PAF and EI

Access to finance is particularly important for SMEs. This is as result of their inability to finance their start-ups through loans, retained earnings or equity financing (Matshekga & Urban, 2013). Researches have reported several problems related to access to finance which include lack of collateral, excessive outstanding debt, and lack of business skills of the entrepreneurs (Cassar, 2004; Fatoki & Odeyemi, 2010). The relationship between perceived access to finance and small venture creation is a complex one and studies revealed that

enterprises depend on human capital attributes of the individual such as attitudes, gender and level of education (GEM, 2018; Thindisa & Urban, 2018). This means that students' entrepreneurship education has an important role to play in accessing start-up capital for new venture creation. It is believed that the ability of an individual to find start-up capital and its effective utilization for enhanced entrepreneurial intention is contingent on the level of skills and education of the intending student. Therefore, it is pertinent to investigate the moderating role of entrepreneurship education between the two variables. Thus, the hypotheses of the study were formulated based on the literature and stated in null form below:

Ho1: there is no significant relationship between perceived access to finance and students' EI,

Ho2: there is no significant relationship between entrepreneurship education and students' EI, and

Ho3: entrepreneurship education does not moderate the relationship between access to finance and students' EI.

3.0 Research Methodology

3.1 Research Design

The study adopted a cross-sectional survey research where data for the study were collected and analyzed once off to assess the

role of EE on the relationship between access to finance and entrepreneurial intention among undergraduate students in Kaduna State University. The data gathered through survey method was analyzed using structural equation modelling (SEM) technique. PLS-SEM was adopted for data analysis in this study because it is capable of handling a complex model.

3.2 Population of the Study

The population for the study comprised the 420 final year undergraduate students in the faculty of management science, Kaduna State University. These students were selected because they are more relevant to the study as they are being offered an entrepreneurship and business courses which is an indication that they will improve their career interest to becoming future entrepreneurs.

3.3 Sample Size and Sampling Technique

The sample size was selected from the target population of the study. A sample size of 201 as suggested by Krejcie and Morgan's Table from the total population in the faculty of management science is considered satisfactory for the study due to time and monetary constraints affecting the researcher's ability to cover the entire population. The study also used a probability sampling, specifically a simple random sampling technique.

3.4 Variables of the Study and Measurement

The instrument consists of questions that influence an individuals’ EI. The questions were all linked to the idea of one becoming an entrepreneur at some point in their life. These questions are designed using a five point Likert scale ranging from (1-strongly disagree to 5-strongly agree). The construct is measured using 6 items adapted from (Linan & Chen, 2009). Entrepreneurship education is measured by the respondents’ perception on the motivation, management skills and ability to recognize opportunity, of the entrepreneurship courses offered. The construct is measured using 5 items adapted from (Souitaris, Zerbinati & Al-laham, 2007). Furthermore, perceived access to finance include information about the respondent’s perception on financial access and availability. The participants would have to show their level of agreement with all the factors. The construct was measured using 4 items adapted from (Otori, Lele & Sadiq, 2018).

4.0 Results and Discussion of Findings

4.1 Measurement Model Assessment

There are two types of validity used to assess the measurement model which are convergent validity and discriminant validity. These measures clarify the statistical value and significance of research model in terms of reliability and credibility for giving acceptable results or not.

4.1.1 Convergent Validity

Past results suggest that good convergent validity is based on three criteria; factors loadings, average variance extracted (AVE) and composite reliability (CR) (Hair et al., 2014). The result of the tests should not be lower than 0.7, 0.5 and 0.7 respectively as recommended by Hair et al. (2017). The items’ loadings for this model were above 0.7. Besides, the composite reliability for every dimension was more than 0.7 and the AVE for every variable achieved more than 0.5. According to these results, the convergent validity was established and fit the threshold as determined in the methodological literature (see Table 1 below).

Table 1

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EE	0.750	0.749	0.842	0.572
EI	0.827	0.851	0.883	0.655
EE * PAF-> EI	1.000	1.000	1.000	1.000
PAF	0.809	0.821	0.869	0.624

4.2 Discriminant Validity

The three criteria used for evaluating the level of discriminant validity are cross-loadings, fornell-larcker and HTMT.

4.2.1 Fornell-larcker Criteria

To address the items’ loadings on Fornell Larcker, scores should be greater than the

following items’ loading of the latent variable for another variable (Hair et al., 2017). Table 2 below illustrates that the loading of each indicator was greater than its respective latent variable and its loading on another latent variable. This signifies that using Fornell Larcker criteria, the discriminant validity is achieved.

Table 2

	EE	EI	PAF * EE	PAF
EE	0.757			
EI	0.592	0.809		
PAF * EE	-0.209	-0.274	1.000	
PAF	0.166	0.223	-0.158	0.790

4.2.2 Cross Loadings

To address the items’ cross-loadings, scores were identified by interpreting the score of outer loadings for the items of the latent variable in every variable. This should be greater than the following items’ cross-

loading of the latent variable for another variable (Hair et al., 2017). Table 3 illustrates that the outer loading of each indicator was greater than its respective latent variable and its cross-loading on another latent variable.

Table 3

	EE	EI	PAF * EE	PAF
EE1	0.743	0.451	-0.175	0.117
EE2	0.760	0.404	-0.111	0.018
EE3	0.812	0.450	-0.107	0.131
EE5	0.707	0.477	-0.230	0.218
EI3	0.592	0.854	-0.200	0.201
EI4	0.461	0.833	-0.240	0.169
EI5	0.480	0.785	-0.253	0.180
EI6	0.322	0.762	-0.199	0.170
PAF * EE	-0.209	-0.274	1.000	-0.158
PAF1	0.103	0.207	-0.099	0.830
PAF2	0.163	0.183	-0.168	0.806
PAF3	0.038	0.063	0.006	0.735
PAF4	0.169	0.183	-0.160	0.786

4.2.3 Heterotrait Monotrait Ratio

Looking at Table 4 below, it is seen that there is discrimination among the variables. This is as a result of the relationship between the variables. The maximum

threshold value for HTMT is .85 which means that the variables are discriminating themselves in this regard, consequently, HTMT is also attained.

Table 4

	EE	EI	PAF * EE	PAF
EE				
EI	0.722			
PAF * EE	0.238	0.302		
PAF	0.195	0.242	0.151	

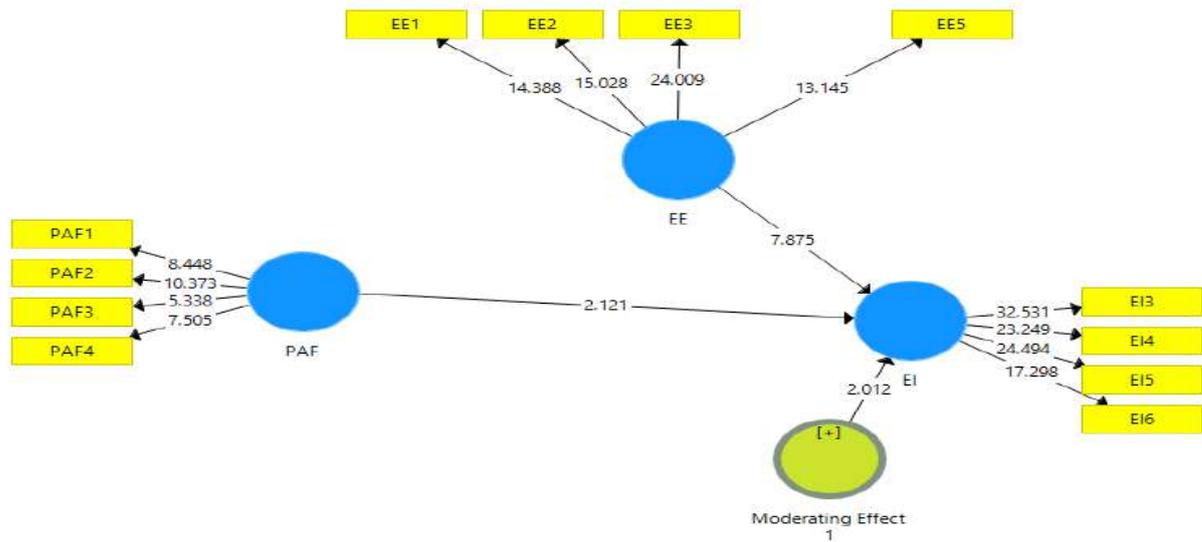
4.3 Structural model assessment

In order to obtain an acceptable result on the basis of path modelling technique, the bootstrapping technique was applied to determine the path coefficient. More precisely, the path coefficient was analyzed (Hair et al., 2017). Accordingly, Table 5 shows the results of hypothesis testing, where two were found to be significant due to the t-value > 1.96 and p<0.05 which are as follows: Hyp 1 was testing the positive relationship between PAF and EI. The statistical inferences showed that A2F impact on EI with an r value of 12%, and

this was found to be statistically significant with t-value of 2.121 and a p-value of 0.034. Hyp 2 was testing the relationship between EE and EI, it was seen that EE impacts on EI with 55% and this was found to be statistically significant with t-value of 7.875 and a p-value of 0.000. Hyp 3 was testing the moderating role of EE on the relationship between PAF and EI. It was also discovered that EE had an inverse moderating role on the relationship between the variables with an r value of -0.13%, t-value of 2.012 and a p-value of 0.044.

Table 5

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
EE -> EI	0.544	0.546	0.069	7.875	0.000
EE * PAF -> EI	-0.134	-0.135	0.067	2.012	0.044
PAF -> EI	0.111	0.118	0.052	2.121	0.034



5.0 Conclusion and recommendation for future research

Structural model was used to analyze the data, where entrepreneurship education was identified to have a strong capacity to influence entrepreneurial intentions of students. It also moderates the relationship between perceived access to finance and entrepreneurial intentions of students. This means that the ability of a student to access finance for enhanced entrepreneurial intentions is dependent on his/her level entrepreneurship education. It is recommended therefore, that EE should be encouraged as it predict PAF and EI relationship. Perceived access to finance was also capable of influencing students' entrepreneurial intentions. This study made a meaningful contribution to the literature. However, the findings are limited to one single university in Nigerian context. More

studies that would include respondents from numerous universities are therefore, required so that the generalizability of the findings could be enhanced. Again, this study only considered access to finance as a predictor of entrepreneurial intentions, as such, more demographic variables need to be incorporated in the model to check for variability in entrepreneurial intentions among students caused by other factors.

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Moderating Role of Organisational Culture on the Relationship between Strategic Thinking, Knowledge Management Capabilities and Organisational Performance: A Conceptual Model

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Abstract

This study investigated the relationship between strategic thinking, knowledge management capabilities and organisational performance through the moderating role of organisational culture. The study sourced relevant literature through google search engine and other related search engines. In the extant literature, the study discovered contradiction on the relationship between the variables. Based on these inconsistencies, a conceptual model was designed to demonstrate the relationship between strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational performance. The research also depicted the extent to which organisational culture could moderate the relationship between the variables. Thus, strategic thinking, knowledge management capabilities and organisational culture have been conceptualized on the basis of Resource-based View theory. The model serves as basis for conducting empirical research in the future for organisations that want to implement the outcome of relationship between the research variables.

Key Words: Strategic thinking, knowledge process capability, knowledge infrastructure capability, organisational culture, organisational performance.

1.0 Introduction

Organisational performance is the result of an effort made by organisations in providing goods and services to their stakeholders. Organisational performance has been defined as development and success of an organisation (Koochang, Paliszkievicz & Goluchowski, 2017). Daft (2000) viewed organisational performance as effective and efficient utilization of resources toward achieving organisational goal. Okeke-Uzodike and Chitakunye (2014) explained that inefficiency, ineffectiveness, non-

responsiveness and lack of equity have been linked to poor performance of organisations.

Strategic thinking is directly related to organisational performance (Alhatmi, 2020). Bonn (2001) and Juma, Minja and Mageto (2016) stated that organisations should cultivate the culture of strategic thinking at individual and organisational levels to enhance performance. Strategic thinking is a process of generating, analysing and evaluating ideas to be used to achieve organisational performance (Goldman, Scott & Follman, 2015). According to Ershadi and Dehdazzi (2019), the concept of strategic

thinking should be examined simultaneously with knowledge management capabilities (KMC). Knowledge process and infrastructural capabilities as components of KMC are directly associated with organisational performance (Imran, 2015; Alaarj, Abidin-Mohamed & Bustamam, 2016). In the above views, scholars indicated that strategic thinking, knowledge process and infrastructural capabilities are valuable strategic resources that should be managed by organisations to achieve their goals (Gold, Malhotra & Segars, 2001). In fact, they are the main factors that generate added value for organisations (Hussinki, Ritala, Vanhala & Kianto, 2017). As such, future studies should simultaneously investigate the effect of strategic thinking, knowledge process and infrastructural capabilities on organisational performance (Janatyan, Karavand & Rajabi, 2021; & Badadwa, Soundararajan & Al-Manasir, 2020).

The literature trending on the association between strategic thinking and organisational performance mostly revealed inconsistencies. For example, Alhatmi (2020) and Manafa, Okeke and Atueyi (2022) established positive relationship, while Alatailat, Elrehail and Emeagwali (2019) and Yeo and Lai, (2020) found insignificant association.

Also, with the exception of Rashid and Yunus (2020) and Kaldeen, Nawaz and Hassan (2020) who found significant relationship between knowledge process capability and organisational performance, there is evidence of negative relationship between the variables (Wijaya & Suasih, 2020; Ogunbanwo, Okesola & Sherl, 2021). In other studies, the relationship between knowledge infrastructure capability and organisational performance was found to be positive (Payal, Ahmed & Debnath, 2019) except in the studies conducted by Omrani and Azam (2020) and Joshi and Chawla (2019) who found negative correlation.

In order to address the contradictions, weak or inconsistencies, a moderator can be introduced to investigate the extent to which it can weaken, strengthen or reverse the relationship (Lowry & Gaskin, 2014). Moreover, Song, Li and Zhao (2019), Hussain, Chaudhary, Arshad and Akram (2020) and Ayham and Chris (2018) suggested that future research could use organisational culture as a moderator to investigate the relationship between the variables. As such, this study introduces organisational culture to moderate the relationship between the dependent and independent variables.

Through organisational culture, organisations can enhance their performance

using strategic thinking and management of knowledge capabilities. Thus, organisations certainly require a model that can encourage strategic thinking, knowledge acquisition, storage, sharing and application by human resource, organisational structure and information technology infrastructure. Also, the complex and dynamic nature of strategic thinking and knowledge management capabilities may require an integrated model that can describe the system thinking as it relates with other variables to enhance performance (Gold, et al., 2001).

Numerous studies have independently examined the relationship between strategic thinking and organisational performance (Alshraideh, 2022; & Manafa, Okeke & Atueyi, 2022) as well as knowledge process capability, knowledge infrastructure capability and organisational performance (Nguyen & Nguyen, 2022; Fraihat & Al-feef, 2022). However, there is scarcity of study in the extant literature that simultaneously examined the relationship between strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational performance using organisational culture as a moderator. Thus, this study develops a conceptual model explaining the relationship between the variables.

2.0 Literature Review

2.1 Concept of Organisational Performance

Organisational performance is a critical area of management which many scholars have paid attention to in recent time (Janadari, 2020). It is multidimensional in nature influenced by different factors to ensure survival of organisations. According to Obeidat, Al-Suradi, Masa'deh and Tarhini (2016), organisational performance is the ability of organisations to meet their goals and also satisfy the needs of their stakeholders. It is the effectiveness and efficiency of organisations (Chu-Hua, Madu & Lin, 2001). Organisational performance is the efficient and effective utilization of resources, demonstration of responsiveness to customers' needs and ensuring fairness among staff toward achieving organisational goal.

Efficiency is the ability to accomplish a job/task within a minimum expenditure of time and effort (Sink & Tuttle, 1989). Effectiveness is a goal oriented concept which measures what an organisation seeks to achieve (Ostron, Parks, Percy & Whitaker, 1979). According to Robin (1990), when using effectiveness as a measure to determine organisational performance, the perception of organisational members could be measured.

Organisational responsiveness focuses on goal achievement directed towards customer services. Ostron, Parks, Percy and Whitaker (1979) defined responsiveness as an assessment of the extent to which the demands and preferences of customer's needs are satisfied by an organisation. The ability of organisations to ensure equity among employees has been a concept of major concern for industries, labour and government in recent times. This is because employees always expect balance between their effort at work and reward for work compare to other workers input and outcomes in the same organisation or related organisations. Pidd (2012) defined equity as fair treatment of staff/customers or equal distribution of benefit or services to staff/customers of an organisation which tends to motivate employee towards optimal performance.

2.2 Concept of Strategic Thinking

The purpose of strategic thinking is to discover novel and imaginative strategies which can re-write the rules of the competitive game and envision potential features meaningfully different from the present (Heracleous, 1998). Wootton and Horne (2002) opined that strategic thinking involves not only reflective, analytical, critical, numerical, creative, imaginative and predictive thinking, but also pragmatic, empathic and ethical thinking which are

essential for perfect strategic thinking. Consequently, present study adopts the concept of strategic thinking understood from systematic and holistic point of view as system perspective, focus on intent, thinking in time, a hypothesis-driven approach and an ability to be intelligently opportunistic (Leidtkat, 1998) which may require organisational culture to enhance performance (Juma, Minja and Mageto, 2016).

System perspective is predicated on the ability to take holistic view of an organisation and its environment rather than individual component. Focused intent is a passion for winning at all levels and ability to sustain the success for a long period of time (Prahala & Hamel, 1990). It is an obsession for winning that undermines limitations imposed by available resources and capabilities.

Also, an intelligent opportunism deals with the ability of managers to have broad and flexible intention that not only refines the existing strategy, but also accommodates emerging opportunities. It gives room for managers to leverage on new emerging strategies which may not be part of earlier formal vision of the organisation (Bonn, 2001). Hypotheses drive centres on scientific method which deals with hypothesis generation and testing as central

activities (Leidtkat, 1998). According to Leidtkat (1998), strategic thinking is both creative and critical. This means that in hypothesis driven, scientific method accommodates both creative and critical thinking sequentially through the use of iterative cycles of hypothesis generating and testing. Thinking in time is predicated on the fact that strategic thinking is not solely driven by the future, but by the gap between the past, current reality and the intent for the future (Hamel & Prahalad, 1994). Thinking in time connects past, present and future to the organisational goals and objectives (Lawrence, 1999) using institution's memory and broad historical context as critical input into the creation of its future (Neustadt & May, 1986).

2.3 Concept of Knowledge Process Capability

Knowledge process capability is one of the major resources needed by organisations for growth and survival in twenty first century. Failure to use knowledge obtained from learning and the inability of organisations to code and document knowledge couple with absence of incentives to share knowledge are the most important factors in forgetting knowledge in organisations (Ershadi, et al., 2019). Knowledge process capability is a managerial activity that involves employees in the acquisition, storage, sharing and utilization of knowledge in organisations. It

is a systematic process of acquiring knowledge, storage, retrieval, sharing and application of knowledge in strategic thinking, planning and decision making process to enhance performance.

Knowledge acquisition refers to the ability of organisations to acquire new knowledge within and outside the organisation to address extant and emerging challenges in order to enhance organisational performance (Gold et al., 2001). It is an essential process of developing new content or replacing existing content of knowledge within the organisation's tacit and explicit knowledge (Pentland, 1995). Knowledge acquisition is a consistent and procedural managerial activity concerned with obtaining useful data, information and knowledge relevant to the objectives of organisations. Knowledge acquired, if not adequately stored, may be loss and could negatively affect performance of organisations. In this regard, Alavi (2000) posited that the creation of new knowledge within and outside the organisation is not enough, but having adequate mechanisms on ground to store and retrieve the knowledge created when the need arises are significant to performance of organisations. Kordab, Raudeliuniene, Meidute-Kavaliauskiene (2020) defined knowledge storage as recording and preservation of new and extant organisational knowledge in database and repositories to increase efficiency in

discharging responsibilities, achieving knowledge strategy and enhancing organisational performance.

Having acquired, stored and retrieved knowledge, it is significant for the knowledge to be disseminated for consumption by individuals and organisations to enhance performance. Knowledge sharing is one of the most essential processes of knowledge management in organisations on ground that helps the flow or transfer of knowledge between individuals, groups or organisations using different communication channels (Gupta & Govindarajan, 2000; Alavi & Leidner, 2001). The objective of knowledge application is to utilize knowledge in practical terms. It means that the success of knowledge management in any organisation is determined by the extent to which knowledge acquired, stored and disseminated and adequately utilized to enhance performance of the organisation. This shows that application of knowledge is the ability not only to acquire and assemble knowledge, but also to use for decision making and problem solving in organisations (Cohen & Levinthal, 1990; Gold et al., 2001).

2.4 Concept of Knowledge Infrastructure Capability

Knowledge infrastructure capability is the base on which knowledge mechanisms and technologies rely, and reflects the long-term foundation for knowledge management in organisations (Becerra-Fernandez, & Sabherwal, 2015; Abed Al-Qader, 2014; Pannu, 2017). It is the context within which knowledge is acquired, stored, retrieved, applied and protected by employees and the organisation as a whole (Imran, 2015; Zaied, Hussein & Hassan, 2012). The instruments of knowledge infrastructure capability include information technology, organisational structure, and human resources.

Information technology is a significant knowledge management infrastructure that facilitates the development and utilization of knowledge within and between units, sections and employees to enhance performance. It contributes to efficiency in operation, management of inventory, integration of organisational activities and processes to enhance performance (Liao, Tseng & Ho, 2015). Information technology refers to technical system within an organisation which determines how knowledge is circulated, accessed and utilised (Chang & Chuang, 2011). The flow of knowledge in an organisation does not only occur through the conventional vertical

or top-down approach, but also from bottom-up and horizontally with the aid of structural infrastructure (Mom, Van Den Bosch & Volberda, 2007). It is the formal allocation of organisational responsibilities, roles, tasks and authorities, including policies, procedure, hierarchical relationship and sectoral boundaries (Gold, et al., 2001). Every organisation requires human resource (people) for its successful operation. They are one of the major components of organisational memory responsible for discharging organisational activities toward achieving its objectives. Considering their significance within the framework of knowledge management infrastructure, organisations must strive to facilitate involvement of its employees in organisational activities (Gharakhani & Mousakhani, 2012).

2.5 Strategic Thinking and Organisational Performance

A study conducted by Alhatmi, (2020) explored the role of strategic thinking on high performance work practices and found a statistically significant correlation between strategic thinking and high performance work practices. Al Zu'bil (2020) examined the extent to which strategic thinking promotes entrepreneurship performance and discovered that strategic thinking enhances entrepreneur performance. Likewise, Aghaie, Dehmardeh, Haghightmanesh,

Saravani, Khazai & Esfahani (2019) examined the impact of strategic thinking and its components on organisational performance. The study revealed positive relationship between strategic thinking and organisational performance. However, these studies ignored the moderating role of organisational culture which would have made contribution.

Similarly, Oloo, Opio and Ongeti (2021) examined the relationship between strategic thinking and performance of land administration. The result showed that strategic thinking has positive relationship with performance of land administration. Also, Alajeeb and Al Najjar (2021) undertook a study to identify the impact of strategic thinking on organisational excellence through the mediating role of strategic foresight. Statistically, strategic thinking was discovered to have positive influence on organisational performance. Nevertheless, these studies did not simultaneously consider other equally important variables such as knowledge process and infrastructure capabilities which would have influenced organisational performance.

Alshraiedeh (2022) conducted a study to investigate the impact of strategic thinking on the performance of industrial companies listed on the Amman Stock Exchange. The

result showed that all the dimensions of strategic thinking such as innovation, intelligence, future prediction and organisational thinking significantly impact on profitability, return on investment and market share. More so, Mbaya, Maina and Namusonge (2021) investigated the relationship between strategic thinking and performance of small sized dairy processing firms in Kenya. The result showed that strategic thinking significantly influences performance of dairy processing firms. These studies were limited to stock exchange and dairy processing farms. Thus, the result could be judgemental. The studies excluded the extent to which organisational culture could moderate the relationship between the variables.

However, in another breakthrough study, Toubia, Abdulrab and Ameen (2017) examined the effect of strategic thinking on organisational performance in oil and gas industry in Libya. The outcome revealed a negative relationship between strategic thinking and organisational performance. Moreover, Jaffar, Alnorawi and Meteab (2019) investigated the impact of strategic thinking on improving the administrative and financial performance of tourism organisations in Iraq. The Authors' reported that the influence of two elements of strategic thinking (systems perspective and intelligent opportunism) did not exist, while the impact of other three elements of

strategic thinking (intent-focused, thinking in time, and hypothesis-driven) in the improvement of administrative and financial performance of was significant. These studies laid emphasis on strategic thinking without including other equally important variables like organisational culture, knowledge process and infrastructure capability which would have influenced administrative and financial performance.

2.6 Knowledge Process Capability and Organisational Performance

Nguyen and Nguyen (2022) analysed the impact of knowledge management on business performance of door manufacturers in Vietnam. Result offers substantial support of the dimensions of knowledge process capability on organisational performance. Also, Sahibzada, Jianfeng, Latif, Shah and Sahibzada (2020), examined the interrelationship between trust, organisational climate, knowledge management processes and organisational performance through intervening role of creative organisational learning. Finding revealed a direct and significant impact of knowledge management processes on organisational performance. Although these studies have contributed to knowledge management literature, nonetheless they avoided how the role organisational culture could have been played as a moderator in influencing the relationship between the

constructs which could have added more value.

Khan, Ajmair and Kazimi (2022), explored the impact of knowledge management on organisational effectiveness of health department in AJ&K. Finding showed that knowledge management process satisfactorily strengthens organisational effectiveness. Likewise, Mzwini, Okharedia and Lekunze (2022) did a study on the role of knowledge management capabilities in the performance of eight (8) water corporations in Botswana. The Authors' confirmed that recognition of knowledge management process increases organisational performance. Notwithstanding, the above studies laid more emphasis only on knowledge creation, conversion and sharing as measures of knowledge process capability, thereby ignoring other equally important measures like knowledge storage and utilization that could have added more value to their research. This could weaken the strength of their results.

Again, El Kharraz and Boussenna (2021) conducted a study on moderating effect of culture on the relationship between knowledge management and organisational performance in the university context. Finding revealed that knowledge management processes have potential for

enhancing performance of universities. Furthermore, Stephen (2022), examined the influence of knowledge management practices on the performance of small and medium enterprises (SMEs) in Kenya. Finding illustrated that the components of knowledge management process satisfactorily explain performance of SMEs. Given the fact that these studies focused on educational sector and SMEs only ignoring other relatively important sectors, the findings cannot be generalized.

However, Omrani and Azam (2020) examined the strategies for knowledge management and organisational performance of Libyan transport sector. The outcome revealed that knowledge process capability negatively influence organisational performance. More so, Wijaya and Suasih (2020) analysed the impact of knowledge management on the performance of silver craft SMEs through mediating role of competitive advantage. In this study, knowledge management dimensions namely, knowledge acquisition, sharing and application negatively influence organisational performance. Considering the fact that these studies were limited to creative industry and transport sectors only with different cultural context, their results cannot be generalized. Also, the moderating role of organisational culture was not considered by the studies.

Again, Fahmi and Yulianto (2021) did a study titled the impact of knowledge management capability on company performance and competitive advantage through the mediating role of innovations. The result indicated insignificant impact of knowledge management (process) capability on financial and operational performance. Ogunbanwo, Okesola and Sheryl (2021) examined the relationship between knowledge management capabilities and academic performance of universities in Nigeria. The result showed that components of knowledge process capability negatively influence academic performance of universities. The major limitation of these studies is their exclusion of other equally important variables like strategic thinking which could have contributed to organisational performance.

2.7 Knowledge Infrastructure Capability and Organisational Performance

Fraihat and Al-feef (2022) investigated the effect of knowledge management infrastructure on institutions performance through the moderating role of fintech innovation on the relationship between the constructs in Jordan. The result illustrated a significant impact of knowledge management infrastructure on performance of financial institutions. Similarly, Senthufhe (2020) examined the role knowledge infrastructure capability played

in the market performance of Redman Consulting and found that marketing performance of the firm was strongly influenced by the structure, culture and information technology which were the dimensions of knowledge management infrastructure for the study. However, these studies excluded the role organisational culture could play as a moderator which would have influenced organisational performance.

Similarly, Rivai and Sfenrianto (2020) did another explorative research titled the impact of knowledge management capability on organisational performance: A case study of an international school in South Tangerang, Indonesia. Result demonstrated that all components of knowledge infrastructure capability strongly lead to organisational performance.

Likewise, Rusilowati, Sunarsi and Affandi (2021) conducted a study on the effect of knowledge management on performance of lecturer and performance of private universities. In this study, knowledge management was measured with dimensions of knowledge infrastructure capability. The analysis of online survey suggested that there exists an association between knowledge infrastructure capability and university performance. Furthermore, Tsetim, Adegbe and Agema (2020)

examined the relationship between knowledge management infrastructural capability and innovativeness of SMEs in Benue state, Nigeria. Statistically, the result of Pearson Correlation analysis showed that all dimensions of knowledge infrastructure capabilities are very significant to SMEs innovation and performance. These studies focused on educational sector and SMEs only, without considering other equally important sectors which would have added value to their results.

In another study, Fitria (2020) examined the impact of knowledge management ability on organisational performance through the mediating role of organisational trust. In the study, knowledge infrastructure capability was one of the major variables investigated. Findings showed that knowledge infrastructural capability positively associates with organisational performance. In related development, Rezaei, Khalilzadeh and Soleimani (2021) conducted a study on the impact of knowledge management on organisational performance of Kabul Steel Plant in Afghanistan through the mediating role of human capital. The result showed that knowledge infrastructure capability; strategy and technology negatively impact on organisational performance while other dimensions; structure, culture, leadership, and trust positively influence organisational performance. The studies laid emphasis on

knowledge management capabilities thereby avoiding other equally significant variables like strategic thinking and organisational performance which would have influenced organisational performance.

Kaldeen and Nawaz (2020) analysed the effect of knowledge management capabilities on organisational performance of Star rated Hotels in Sri Lanka. The study used information technology, human resource and culture as measures of knowledge management capabilities. Finding showed that information technology and human resource capabilities correlate with organisational performance while culture has no significant relationship with organisational performance. This indicates that organisational knowledge infrastructure dimensions indirectly influence organisational performance. Alhammadi, Kasim and Lohana (2022) conducted a study on the development of knowledge management factors affecting construction project performance model of UAE construction companies. Finding illustrated that information technology and process made positive impact on performance of construction companies while culture and leadership negatively influence performance of construction companies. Nevertheless, the studies ignored contributions of other significant variables such as strategic thinking to organisational performance.

However, El-Sawalhi and Matar's (2015) study on the relationship between the knowledge management capabilities and intellectual capital as a measuring tool of organisational performance revealed that knowledge management infrastructure capability has less impact on organisational performance. Likewise, the result of a study by Omrani and Azam (2020) on the strategies for knowledge management and organisational performance in Libyan transport industry where dimensions of knowledge infrastructure capability were considered as measures of KM showed negative relationship between the variables. Given the fact that these studies concentrated on United Nations Relief and Work Agency and transport sector only, the results could be judgemental. This reveals a huge gap which future study should address.

Similarly, Abualoush, Masa'deh, Bataineh and Alrowwad (2018) undertook a study on the interrelationships among knowledge management infrastructure, knowledge management process, intellectual capital, and organisation performance. Statistically, the result indicated that knowledge management infrastructure has negative relationship with organisation performance.

2.8 Organisational Culture as a Moderator

Every organisation is unique and has different culture for its operations. Organisational culture is a system of values, beliefs, behaviours and ideas instituted by organisations to guide employees on the operations of the organisation. It drives the organisation forward and establishes operational ecosystem in which every employee tries to achieve the goal set by the organisation (Narayana, 2017). This indicates that understanding the culture of an organisation is significant for the employees, stakeholders and organisations at large (Djangone & El-Gayar, 2021). In this regard, there is the need to understand the extent to which organisational cultural could influence organisational performance. Thus, this study introduces organisational cultural to demonstrate the extent to which it could moderate the relationship between strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational performance. This is predicated on the fact that organisational culture is a significant element that can be used to explain organisational performance (Baba & Audu, 2021). However, previous studies on strategic thinking, knowledge process and infrastructure capabilities have overlooked the extent to which organisational culture could moderate the simultaneous effect of dependent variables

on organisational performance. Thus, organisational culture may impact significant belief and norm on strategic thinking, knowledge process and infrastructural capabilities of organisations, which may also influence effectiveness, efficiency, responsiveness and equity of organisations.

3.0 Underpinning Theory: Resource-Based View

The Resource-Based View (RBV) focuses on resources of organisation (Penrose, 1959; & Barney, 1991). The theory describes how firm can achieve sustainable competitive advantage through acquisition and control over resources (Barney & Clark, 2007). It explains that resources of organisations that are valuable, rare, imperfectly imitable and imperfectly substitutable are responsible for gaining sustainable competitive advantaged and superior organisational performance (Barney, 1991). The theory is concerned with linking firm internal resources with organisational performance (Hansen & Wernerfelt, 1989). Moreover, Abu Bakar and Ahmad (2010) concluded that intangible resources are significant determinants of organisational performance. Thus, strategic assets such as strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational culture influence organisational performance from

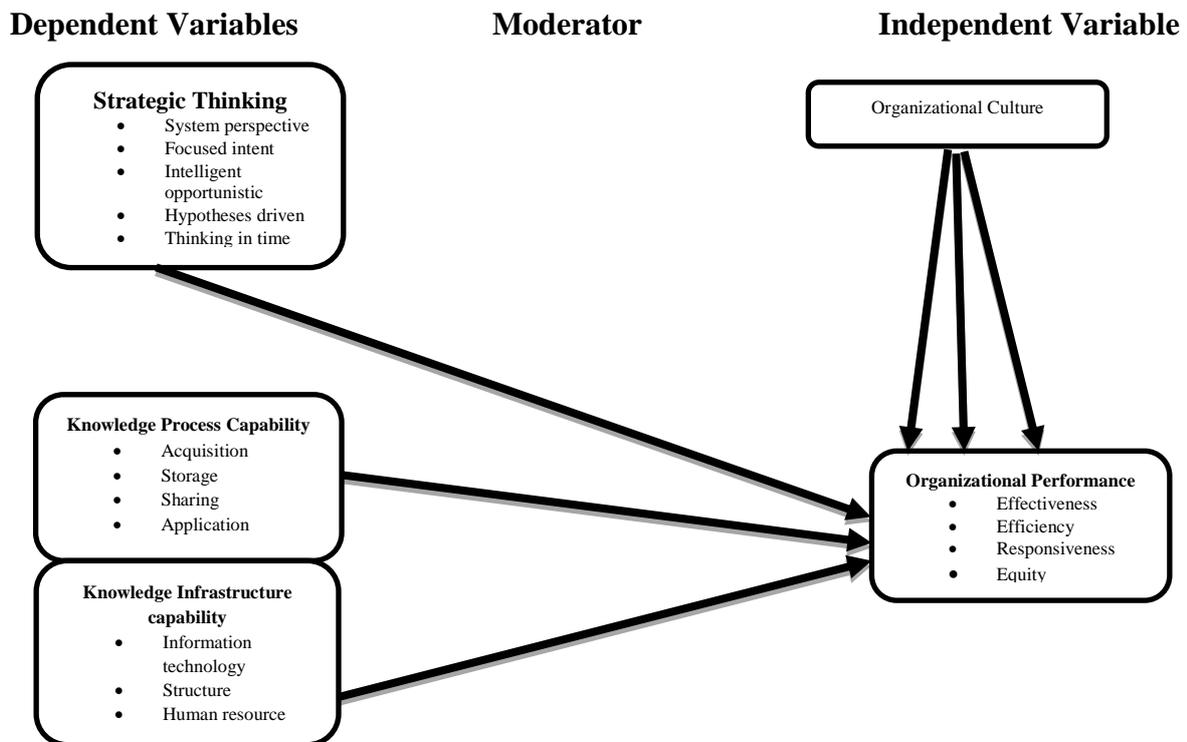
the Resource-Based View (Crook, Ketchen, Combs & Todd, 2008).

Therefore, this study proposes that RBV theory may shed light on the influence of strategic thinking, knowledge process capability and knowledge infrastructure capability on organisational performance through the moderating role of organisational culture. The theory views strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational culture as valuable resources of organisations. This is because Barney (1991) and Hall (1992) explained that attributes related to past experience, future of organisation, organisational culture, knowledge and competences are essential for organisational performance (Hamel & Prahalad, 1996). Also, the theory indicates that strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational culture are valuable, rare, inimitable and non-substitutable resources of organisation, which when properly conceived and implemented, may influence organisational effectiveness, efficiency, responsiveness and equity. For example, the system perspective of an organisation; strategic intent, think in time, hypothesis driven and intelligent opportunism may influence organisational performance.

The foundation of this theory gave additional perspective of this research on the ground that variables that are valuable resources to the organisation will be considered in the study along with other variables that drive the organisational performance. Also, the theory lays a well-developed framework for understanding different resources of organisation such as strategic thinking, knowledge process and infrastructure capabilities that may identify whether an organisation will perform through a moderating role played by other resources such as organisational culture. In

practical sense, this theory explains why organisations rely on their valuable resources to achieve efficiency, effectiveness, responsiveness and equity. Therefore, this study discusses the impact of strategic thinking, knowledge process and infrastructure capabilities on organisational performance through the moderating role of organisational culture base on the assumption proposed by RBV theory.

Figure 1: Conceptual Model



Source: Developed by the Researchers based on the literature, 2022

4.0 Methodology

This study sourced relevant literature through google search engine and other related search engines. The researchers did an electronic database searched through Google Scholar and Research Gate and other search engines for keywords, article titles and abstracts using the terms “strategic thinking”, “knowledge process capability”, “knowledge infrastructure capability” and “organisational culture” which were the terms used for the study. In order to avoid duplication of articles, we double-check and reviewed keywords, titles and abstracts. Thus, we identify and review articles which were relevant to this study.

5.0 Conclusion

This study reviewed relevant literature on the relationship between strategic thinking, knowledge process and infrastructure capabilities, and organisational performance. The results of previous studies were contradictory. Thus, this study proposed a conceptual model describing association between the dependent and independent variables moderated by organisational culture. The conceptual model is predicated on Resource-Based View Theory. This theory is related to antecedent of strategic thinking, knowledge process capability, knowledge infrastructure capability and organisational culture which the researchers assumed could assist in explaining the

relationship between the dependent and independent variables. Thus, this study is a pioneer in proposing a conceptual model illustrating the relationship between strategic thinking, knowledge process and infrastructure capabilities, and organisational performance moderated by organisational culture.

6.0 Limitation and Suggestion for Future Research

Like other studies, the limitation of this study is that it has not been tested empirically. Thus, future study should expand scope of the literature and empirically investigate the relationship between the dependent and independent variables to be moderated by organisational culture on the platform of appropriate empirical data to deduce reliable quantitative results.

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Impact of Board Meeting and Board Size on Financial Performance of Listed Industrial Goods Companies in Nigeria

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Abstract

The importance of the board of directors to an organization's capacity to gain investor confidence and enhance financial performance is unquestionable. This paper investigated the relationship between board meetings, size and company financial performance of 13 listed industrial goods companies in Nigeria using a 10-year data set (2012-2021). The data set was extracted from the Nigerian Stock Exchange website and analyzed with the aid of STATA 15 and tested for a panel effect. The result revealed that meetings of the board show insignificant and negative financial performance. However, board size reveals a significant positive effect on financial performance. The study concluded that board meetings of members are crucial for firms' performance. The outcome of the study is important for industrial goods firms for management effectiveness and contribution to the body of knowledge. Managers should take steps to improve their board attributes in accordance with the corporate governance code.

Keywords: Board meeting, the board size, financial performance, return on asset

1. Introduction

The board committee meetings are a reliable predictor of how well and how efficiently a board makes decisions and monitors an organization. According to Johl et al. (2015), directors can get the company information they need to perform their monitoring duties by attending board meetings and participating in the sessions. The corporate board's ability to effectively advise, oversee and discipline management is strengthened when it meets more frequently thereby enhancing the

company's financial success. Non-executive directors now often report the minutes of board meetings to shareholders, making board meetings the sole time they formally participate in corporate affairs. According to Hahn and Lasfer (2001), a non-executive director's participation in board meetings is one sign of their value to the business procedure and indisputably one of the clearest signs of how well those decisions are being reviewed.

All publicly traded companies in Nigeria must abide by a comprehensive corporate

governance code established by the Nigeria Securities and Exchange Commission (SEC) in 2011 to safeguard their business operations. A few provisions of regulation mandated that public company board meetings at least four times every fiscal year. Every director must be present for at least two-thirds of every panel meeting; failure to do so disqualifies a candidate for re-nomination unless there are compelling reasons for doing so, which the board must disclose to the shareholders at the annual general meetings. Again, according to Trivedi (2010), measuring the financial results of a firm's policies and activities is referred to as financial performance. It can also be used to compare the performance of similar enterprises operating in the same industry or to aggregate the performance of different businesses or sectors. financial performance is employed to evaluate a company's financial standing over a specific period.

This study aims to determine how board committee meetings and size affect financial performance (return on asset), specifically concerning Nigeria's publicly traded industrial goods. Numerous examples of well-publicized accounting discrepancies have been explained by advanced countries and emerging countries, as firms engage in a sharp practice that is detrimental to

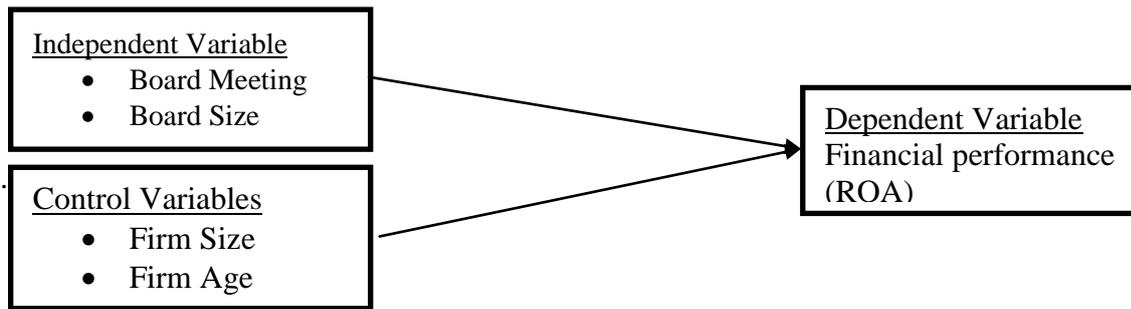
stakeholders' longtime organizational survival. In light of this, factors contributing to such corporate failures include the controversial issue surrounding the appropriate size of the board of directors and lack of adherence to the corporate governance code and managers' failure to fulfill their stakeholder obligations (Abidin et al., 2009).

This study is limited to industrial goods firms and within the span of 2012 to 2021. Board meetings and board size are the study's key factors. The work makes major contributions to the body of empirical literature as well as to the advancement of policy, financial performance (return on asset), and future research. The creation of statements of hypotheses and a survey of pertinent literature are covered in the following section of this essay.

2. Review of Related Empirical Literature

Investigating how board meetings and size affect the financial results of listed industrial goods in Nigeria has been the subject of debate in the empirical literature. Few of these researches have been examined in this subsection. Therefore, the current study conceptualized board meetings and the board size to show the relationship in Figure 1.

Figure 1: Conceptual Framework



2.1. Board Meeting and Financial Performance

An essential element of efficient corporate governance is a board meeting. The agency theory suggests that several board meetings may impact company success. Increased meeting frequency encourages discussion to solve agency issues and encourages idea exchange and performance transparency. According to Bursa, Malaysia and Berhad's (2017) report, the board should regularly convene even if there is no minimum number of meetings required (i.e., at least five meetings if not more frequently as situations necessitate). Additionally, depending on the circumstances of the companies, the number of board meetings is specified under the Malaysian Code on Corporate Governance (MCCG).

Prior studies have shown that regular meetings as part of the governance mechanism increases the organization and communication of the board members (Elamer et al., 2018; Correia & Lucena, 2020). Meetings of the board help clarify

any uncertainty and develop shared expectations, attitudes and values, thereby enhancing the company's effectiveness and performance. Regular meetings can standardize knowledge and discuss the strengths and shortcomings that affect firm's financial performance (Correia & Lucena, 2020; Nguyen et al., 2021). According to Amin et al. (2018), regular board meetings are signifies that a company is not operating well and should be actively monitored by an outside director. Wang et al. (2020) had negative expectations for the board meeting. They discovered that board meetings have a negative impact on company performance. As a result, such businesses hold meetings more frequently to address problems brought about by poor performance. Effective board meetings also make stakeholders aware of issues or disputes in the business operation. Given these contrasting perspectives on the nature of board meetings, it appears that the question of whether board meetings may have a good governance influence on business success is a contentious one.

Board meetings aid a particular board to monitor and supervise its operations while safeguarding shareholder capital (Chou et al., 2013). A similar relationship between board activity and financial results, has also been determined by the frequency of board meetings. Usman (2018) also used a population of 12 listed building materials firms in Nigeria, out of which 9 companies were chosen to form the sample to study the effect of corporate board meeting frequency on the financial performance of listed building materials companies in Nigeria. According to the study, the frequency of corporate board meetings has a favorable but minor effect on financial performance. Moreover, Akinwole (2020) determined the effect of board diligence on the performance of quoted firms in Nigeria and revealed that board diligence impacts the performance of quoted companies in Nigeria.

Conversely, Azar et al. (2016) found a negative link between the number of board meetings and Tobin's Q (financial performance). Also, another study that used ordinary least square regression showed that frequent organizational board meetings and their effectiveness were linked (Ju Ahmad et al., 2017). However, their research discovered that board meeting frequency is not related to firms' performance. As such, having a required board meeting only

emphasizes proper management and control, and enhances the company's financial and non-financial performance. Following the position of previous studies, the hypothesis is stated:

H1: board meeting has no significant effect on financial performance.

2.2 Board Size and Financial Performance

The number of directors on the board determines the board's size (Jensen and Meckling, 1976). There is considerable debate over the ideal size of a board of directors. Several studies have indicated that boards should contain between 7 to 15 directors (Ogbechie et al., 2009). However, in the empirical position of studies, the ideal board size is between 7 to 8 people (Mak and Kusnadi, 2005). These support Jensen's (1993) claim that improved financial performance results from smaller boards. Additionally, once a board has more than 7 to 8 members, its effectiveness declines, and control passes to the chief executive officer.

Conversely, According to Ghabayen (2012), businesses with smaller boards outperform those with larger panels in terms of performance. Also, Lipton and Lorsch (1992) in their study posited that board size in United States corporations' board size is excessive, which raises expenses for shareholders, reduces market chances for competition and eliminates jobs for

staff. Their study recommends that boards should only include 7 or 8 members. Also, when there are more than ten (10) board members, it is challenging for the board to offer guidance and proposals. Likewise, Bennedsen et al. (2008) posited that larger panels result in more business expenses because they affect communication, decision-making and board director synchronization. On the contrary, it was claimed that a more significant board size results in better decision-making since the more directors a board has, the more knowledgeable its members are, thereby increasing the likelihood that business disasters will be avoided (Guest, 2009).

Previously, researchers found that the size of the board and financial performance were inversely related, see Bennedsen et al. (2008), Desoky and Mousa (2012). In these studies, findings revealed a bad correlation between these two parameters in both nations. In addition, Lasfer (2004) similarly discovered a link between board size and financial performance that is unfavorable with a sample of 1402 German market-listed companies. Following research from Switzerland, Japan, and Canada, Haniffa and Hudaib (2006) discovered that board size was inversely connected with FP in the Asian setting (Loderer & Peyer, 2002; Mak & Kusnadi, 2005).

However, other studies discovered a positive correlation between board size and financial performance (Goh et al., 2014). Their studies demonstrated that a larger board size improves firm performance since it allows for better policymaking and oversight of the CEO's operations due to the diversity of abilities and experiences among board members. Additionally, Topak (2011) investigated the connection between the size of the board and the financial success of Turkish companies. Turkey is a developing market with distinctive characteristics, including its ownership structure, social culture and legal system. A sample of 122 Turkish companies from the years 2004 to 2009 was used in the study to examine the relationship between board size and company performance using panel data methodologies. The results showed no connection between board size and company performance. Other studies produced comparable results (e.g., Akinwale, 2020; Yakob & Norraidah, 2021). The results of Kristianti's (2015) investigation into the impact of board features on company performance, which used samples from high-performing firms in the consumer goods sector from 2010 to 2014, showed that board size has a significant detrimental impact on the performance of the firm.

Furthermore, Shukeri et al. (2012) discovered a strong positive correlation

between board size and returned on equity, a metric used to assess the financial performance of businesses. They used 300 publicly traded Malaysian companies, one from every industry, chosen randomly. Their findings demonstrated a favorable association between board size and return on equity. Similar to this, Aman and Nguyen (2012) examined the composition of corporate boards in Japan to assess the impact of board size on performance and discovered a good correlation. The larger board size hence, guarantee the high value of enterprises and thereby implying that:

H2: board size has no significant effect on financial performance.

3. Methodology

A correlational research design was adopted to undertake this study. The study population consists of sixteen (16) listed industrial goods companies on the Nigerian Stock Exchange. Three (3) do not have complete data set for the study period, so the sample is reduced to 13, accounting for more than 67 percent of the listed industrial goods companies in Nigeria. The data for

analysis was sourced from the Machamme Ratio Database and the Nigeria Stock Exchange. The sampled companies were chosen based on three criteria: they had to be industrial goods companies; listed on the Nigerian Stock Exchange; and have data available for the ten years period of 2012 to 2021. A regression model was applied to get a conclusion regarding the factors affecting earnings management. A multivariate regression analysis was suitable because there were multiple predictor variables. The model is as shown.

$$ROA_{it} = \alpha + \beta_1 BMEET_{it} + \beta_2 BSIZE_{it} + \beta_3 FSIZE_{it} + \beta_4 FAGE_{it} + \varepsilon_{it}$$

Where;

ROA = Return on Asset

BMEET = Number of meetings attended by the board of directors

BSIZE = Total number of directors sitting on the board

FSIZE = The logarithm of total asset

FAGE = The age of incorporation to date

α = is the intercept

ε = is the error term of the model

I = firm year

Table 1: Variable definition and measurement

Variable	Acronym	Measurement
Return on Asset	ROA	Earnings before interest and tax/Total assets
Board meeting	BMEET	Number of meetings held in a year
Board size	BSIZE	Total number of directors sitting on the board
Firm size	FSIZE	The logarithm of total asset
Firm age	FAGE	The age of incorporation to date

4. Results and Discussion

The findings presented in the Tables 2 to 7 are the result and outcomes of the study. However, descriptive statistics are shown in Table 2, normality test findings in Table 3, correlation matrix in Table 4, variance inflation factor in Table 5, linearity test findings in Table 4, heteroskedasticity test results in Table 5, Breusch-Pagan Lagrangian Multiplier test rest in Table 6, Hausman specification test results in Table 7

and REM-GLS regression results in Table 8. Table 1 showed the mean, the median, the maximum, the minimum, the standard deviation, the sum square deviation and the observations of all the variables used in the research project. The data was obtained from the annual reports of 13 industrial goods companies listed on the Nigeria Stock Exchange (NSE) from 2012 to 2021 with a total number of 130 observations.

Table 2: Descriptive Statistic Result

Variable		Mean	Std. Dev.	Min	Max	Observations
ROA	overall	11.866	17.888	-5.799	119.633	N = 130
	between	10.842	3.798	45.171		n = 13
	within	14.514	-29.880	86.869		T = 10
BMEET	overall	4.739	0.977	4	9	N = 130
	between	0.641	4	5.7		n = 13
	within	0.756	3.139	8.139		T = 10
BSIZE	overall	9.8	2.129	4	17	N = 130
	between	1.414	6.9	11.3		n = 13
	within	1.635	6.5	15.5		T = 10
FSIZE	overall	6.947	0.532	5.931	8.168	N = 130
	between	0.528	6.269	7.951		n = 13
	within	0.153	6.454	7.373		T = 10
FAGE	overall	28.962	12.935	2	49	N = 130
	Between	13.074	6.5	44.5		n = 13
	within	2.883	24.462	33.462		T = 10

Source: STATA 15 Output, 2022.

Table 2 depicted the results of descriptive statistics on a board meeting, board size and financial performance (return on asset). The

ROA has a mean value of 12% (std. dev. = 18%), with a minimum value of -6% and a maximum value of 112. The mean board

BMEET value of 5% (std. dev. = 0.977), with a minimum value of 4 and a maximum value of 9. This revealed that meeting of the board member was held 5times. The average value of BSIZE is 10 (std. dev. = 2.129), with a minimum value of 4 and a maximum value of 17. This means that board size of the firms is within the frame of corporate governance code but differs from one firm

to another interims of numbers. The control variable of firm size (FSIZE) showed a mean value of 7% (std. dev. = 0.532), with a minimum value of 6%, and a maximum value of 8%. The average proportion of FAGE is 29 (std. dev.=12.935), with a minimum value of 2 and a maximum value of 49 respectively.

Table 3: *Chen-Shapiro QH* test for normal data*

Variable	Obs.	QH	QH*	P-value
ROA	130	0.75096	2.83950	< 0.0001
BMEET	130	0.74425	2.91600	< 0.0001
FSIZE	130	0.97773	0.25389	< 0.0001
FAGE	130	0.95920	0.46523	< 0.0001
BSIZE	130	1.00738	-0.08414	> 0.2

Source: STATA 15 Output, 2022.

Table 3 depicted the normality test result using the Chen-Shapiro (Chen & Shapiro, 1995). The hypothesis that data were normally distributed play a significant role in many empirical studies. Therefore, Table 3 showed that BSIZE has a p-value greater

than 0.05 and other variables (BMEET, FSIZE, FAGE)with levels of significant p-values of 0.01, 0.05, and 0.1 respectively. Hence, results infer that the data set is not normally distributed.

Table 4: *Correlation result*

Variable	ROA	BMEET	BSIZE	FSIZE	FAGE
ROA	1.000				
BMEET	-0.005	1.000			
BSIZE	0.202	0.098	1.000		
FSIZE	-0.158	-0.141	-0.204	1.000	
FAGE	-0.268	-0.044	-0.175	0.422	1.000

Source: STATA 15output, 2022.

Table 4 depicted the correlation between the variables. Result indicated that BMEET failed to show significant association with ROA. Hence, BSIZE have significant

positive relationship with ROA. The links among the predictors showed a maximum coefficient of 0.098 per cent (between BMMET & BSIZE), which fell short of 80

per cent required to prove the presence of variables. multicollinearity among the independent

Table 5: *Multicollinearity Test Result*

Variable	VIF	1/VIF
FAGE	1.31	0.765487
FSIZE	1.26	0.792222
BSIZE	1.07	0.930256
BMEET	1.03	0.974306
Mean VIF	1.16	

Source: STATA 15 output, 2022.

Table 5 depicted the multicollinearity test result (variance inflation factor) and tolerance level computed and their results showed the same results as contained in Table 5, None of the VIF figures were up to 3.3, which was the threshold required for the presence of multicollinearity. Therefore, the

dependent and independent variables were carefully chosen and free of multicollinearity on the effect of the board meeting, and board size on the financial performance of listed industrial goods in Nigeria.

Table 6: *Post-Estimation Test*

	Hetest.	Bruch-Pegan Test	Hausman Test
chi2(1)	3.95	0.42	7.69
Prob > chi2	0.047	0.259	0.174

Source: STATA 15 Outputs, 2022.

Table 6 showed the outcomes of the test and revealed that the data set passed heterascardacity because the p-value was not significant (0.047).Also, the Breusch/Pagan Lagrangian Multiplier Test assists in deciding between the random effects model

and a simple Ordinary Least Square (OLS). Table6, the Prob > Chibar2 is significant (p-value = 0.259), which means there is a panel effect in the model and therefore random effect is preferred for the study.

Table 7: Random-effects GLS Regression

ROA	Coef.	Std. Err.	Z	P>z	[95% Conf.	Interval]
BMEET	-0.187	0.278	-0.67	0.500	-0.731	0.357
BSIZE	0.349	0.131	2.67	0.008	0.092	0.605
FSIZE	-0.510	0.659	-0.77	0.438	-1.801	0.781
FAGE	0.049	0.027	1.77	0.077	-0.005	0.102
Cons.	0.202	5.041	0.04	0.968	-9.677	10.081
Wald chi2 (6)	4427.98					
Prob>chi-square	0.000					
Adj R 2	0.968					

Source: STATA 15 outputs, 2022.

Table 7 portrsyed that BMEET is negative and insignificantwhile BSIZE is statistically significant. It showed that for a board-size composition of the firm, there is an effective financial performanceoutcome. The adjusted R-square of 97% revealed the level of variation between dependent and independent variables. Based on the findings in Table 6, Hypothesis 1 which states that there is no significant relationship between a board meeting and financial performance is accepted and supported by Azar et al. (2014) and Wang et al. (2020). Also, the second hypothesis that there is no significant nexus between board size and financial performance is rejected. These findings are consistent with Goh et al, (2014), Kristianti (2015), and Shukeri et al. (2012) that found a considerable relationship between board size and financial performance (ROA).

5. Conclusion and Recommendations

This study examined the relationship between a board meeting and board size on the financial performance of listed industrial

goods companies in Nigeria. The findings showed that board meeting has a negative and insignificant impact on return on asset, while board size is statistically significant. The study outcome, has policy implications that future research can be extended to another sector of non financial firms because the results cannot be generalized. Therefore, the study recommended that industrial goods companies should take advantage to look at how boards conduct meetings and maintain the maximum size of the board in compliance with the corporate governance code.

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Women Empowerment through Cooperative Societies and Entrepreneurship in North-western Nigeria: A Conceptual Analysis

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Abstract

Empowering women entails outfitting women to be financially autonomous, have positive self-esteem that can confront any challenging situation and take part in development and decision-making activities. This conceptual study is aimed at promoting women empowerment through cooperative societies and entrepreneurship. This study reviewed the existing literature and eventually developed the conceptual framework on the constructs Women Entrepreneurship, cooperative societies and entrepreneurship. The study discovered that there is still much to be done to ensure that women's rights, opportunities, and responsibilities are unaffected by their gender. This can be done by creating a cooperative society that is thought to be a good environment for empowering women and enhancing their unique skills and abilities. Cooperative Societies and Entrepreneurship can be used as a tool to empower women and enhance their economic standing due to their enormous contributions to the society. Additionally, the empowerment of women would result from efforts to promote skills including entrepreneurial activities and cooperative society.

Keywords: Empowerment, Women Empowerment, Cooperative Societies, Entrepreneurship.

1. Introduction

Emerging markets have been the central theme for empowering women ever since the 1990s and have been stressed in the Sustainable Development Goals (SDGs). Women empowerment (WE) in developed countries is recognised as necessary for sustainable economic development and poverty reduction (Khan & Kanwa, 2018; Zapalska, 2017). The word empowerment varies based on its viewpoint, cultural and socio-economic background. Empowerment is a multiform social mechanism which helps people influence their lives, their families, their society and their communities (Kusa, Duda & Suder, 2021; Aguda- Oluwo

& Oni, 2017). Many women are still not treated equally and they face discrimination and exclusion from choices that affect their families and economy. A sizable portion of society still relies upon women to take care of the entire family and manage a lot of household chores without being acknowledged (Dixit, Malik, Seth & Seth, 2022; Asitik & Abu, 2020). This demonstrates that empowering and encouraging women will be crucial to development because they typically care for their families and children. Consequently, it has been established that empowering women also means empowering society as a whole (World Bank, 2011).

According to global figures, women handle 60 % to 80 % of the world's employment and provide 50% of its food (FAO, 2017). They may have little economic advantage and access to valuable capital, considering their substantial contribution (Kusa, et al., 2021). In a similar vein, it has been demonstrated that women constitute more than 50% of the agricultural workforce in the majority of emerging nations. Women make up 47% of the agricultural labour force in sub-Saharan Africa and work as the majority of wage workers in the food supply chain (Tsiboe et al., 2018). In Nigeria, 49.3% of economically active women participate in agricultural labour, which provides 70% of the nation's food supply. According to statistics on gender participation in the workforce, women make up 87%, 78%, and 75% of workers in the hospitality/food service, food production and wholesale/retail industries, respectively (FAO, 2017).

The significance and relevance of women empowerment to the growth and development of a nation cannot be overemphasized and Nigeria not an exception. While the emancipation of women is not an adequate condition, the growth process remains a critical condition (Ezeokafor, Jacobs & Ekwere, 2021; Unanam, 2020). There are three aspects of empowerment for women. The social

dimension means respectful and non-discriminatory social positions. Political dimension means participating in corporate and institutional governance and economic equality makes women in the same role in terms of jobs, investment and control (Tariq Khan, Bhat & Sangmi, 2022; Gupta, 2021; Nayak & Mahanta, 2019).

In this paper, women empowerment means encouraging and assisting them to handle their problems and increase their participation in economic activities. Empowering women means giving them access to school, employment, help, childcare, housing and other support services. Sensitivity, integrated growth and economic inclusion should include women who can have a lasting impact. Bastian, Metcalfe & Zali (2019) suggested that restricting access and ownership of productive assets restrict women's involvement in the entrepreneurship.

Entrepreneurship can also be used as a means to improve women's abilities and skills. Due to its role as a catalyst for social change, entrepreneurship may greatly aid in the empowerment of women by focusing on the underprivileged and weaker segments of society and working to improve their life prospects (Kusa, et al., 2021; Elia, Margherita & Passiante, 2020; Pallavi & Cheruvally, 2018; Agarwal & Lenka, 2014).

There are an estimated 210 million social entrepreneurs worldwide who are working extremely hard to create novel solutions to the world's ongoing environmental and social issues. Social entrepreneurship tackles social issues such as gender violence, unemployment, women's and girls' maltreatment, poverty and other issues (Dixit, et al., 2022; Rosca, Agarwal, & Brem 2020). In particular, the Northern region of Nigeria has a distinctly masculine type of system where male supremacy in all spheres is specified. Although the male monopoly has not yet been overcome in this region, government and NGOs continue to promote women's empowerment.

This is partially a product of the education system and the overwhelming commitment of women to serve in their households due to the segregation of workers and the increased discontinuity of work experience. Meanwhile, the growth of women's entrepreneurship is a vital part of women's economic empowerment and inclusion in the country's economic development (Yen Ng, Wood & Bastian, 2022; Parveen, 2022). The economic potential of women through starting and pursuing small businesses alone has been thought to be improved by the advancement of women through cooperatives and entrepreneurship (Nurasyiah, et al., 2020; Rosca, et al., 2020).

The fact that entrepreneurial empowerment contributes to self-fulfillment and makes women conscious of their place in society has been shown in many studies (Tariq Khan, et al., 2022; Unanam, 2020; Tsiboe, et al., 2018; Zapalska, 2017). Many women engaged in entrepreneurial activities have little access to schooling, productive opportunities and other facilities in developed countries. Such prejudice prohibits them from receiving profits and from engaging effectively in social and political circumstances (Varsha, Gayathri, Sudheendra & Amit, 2019; Khan & Ali, 2016). Likewise, cooperatives are encouraging women's engagement, assuming sustainability, reducing poverty and improving socio-economic growth (Ezeokafor, et al., 2021; Roopchind, 2020).

Cooperatives must be taken into account to address this issue as women empowerment is an international agenda. Cooperatives offer their participants major socio-economic gains. Co-operatives boost their members' profits and negotiation leverage from the economic point of view. It was noted that the social aims of cooperatives are separate from economic ones. They give participants a rare platform for education and training and promote constructive engagement in committees, membership in the Committee and leadership (Adelowokan, et al., 2019; Olawumi, 2015).

Women have been relegated for so many years in many countries especially the developing countries like Nigeria because of diverse perceptions about their femininity (gender) despite their huge contributions to the development and sustainability of the society, families and the world at large (Ezeokafor et al., 2021; Aguda- Oluwo & Oni, 2017). This is equally due to the inconsistency of government policies in respect of women empowerment and the absence of effective monitoring to ensure they yield the desired results. These have made a significant number of the vulnerable in society. Hence, the need to promote women empowerment through cooperatives and entrepreneurship is apparent (Parveen, 2022; Tariq Khan, et al., 2022; Ezeokafor et al., 2021; Asitik & Abu, 2020). Therefore, the objective of this study is to conceptualise how WE can be promoted through cooperative societies and entrepreneurship.

Hence, the paper aims to achieve the following specific objectives:

- i. to examine the relevance and significance of women empowerment particularly in developing economies,
- ii. to investigate how entrepreneurship promotes women empowerment,
- iii. to determine the extent to which participation in cooperatives promotes women empowerment, and

- iv. to propose a model for promoting women empowerment through entrepreneurship and cooperatives.

2. Literature Review

2.1 Concept of Women Empowerment

The World Bank (2011) describes empowerment as an extension of freedom of choice and action and strengthens one's authority and autonomy over life-intensive resources and decisions. In other words, women empowerment (WE) is the mechanism by which women influence and own their lives by widening their options. Then, in a situation where this potential has been historically refused, it is the process of having the capacity to make strategic life decisions. WE, therefore, means that women have the responsibility of their own lives and have the influence of their own such that their rights, opportunities and obligations are irrespective of whether they are born women or men.

Olawumi (2015) proposed that WE is the mechanism by which women redefine gender norms in widespread ways. In the same way, the United Nations Women's Development Fund (UNIFEM) (2010) described economic empowerment for women as "a means of obtaining entry, managing and enjoying the material benefits of access and control on a permanent and long-term basis. In line with the

Development Policy of the United Nations (2015), empowering women means empowering women by inspiring them to live for desired aims. This is a mechanism in which women gain more influence over capital (income, knowledge, information, technology, skills and training), decision-making, enhancing the self-image of women, taking an active part in the process of transition and developing the skills to protect themselves.

2.2 Concept of Entrepreneurship

An entrepreneurial practice plays an important role in the creation of jobs, the provision of self-employment and enhancement of the economic position for those who have started their own companies (Kusa, et al., 2021; Elia, et al., 2020). Several studies address the concept of entrepreneurship as a desire to do something, and the one who demonstrates the will is generally regarded as a businessman (Khan & Kanwa, 2018; Paul, Parthasarathy & Gupta, 2017). Yen Ng et al (2022) and Alkhaled & Berglund (2018) defined entrepreneurship as ability to find and transform challenges into marketable innovations, goods and services. In Mitchell (2014), entrepreneurship is described as the method of efficiently assembling required development factors consisting of human, physical and information capital. Entrepreneurship is also seen as a creative

and risk-taking development element, with business incentives related to uncertainty and profit (Muberekwa & Nkomo, 2016).

It was also suggested that entrepreneurship helps creative people to make rewards and survive better than others. He continues to claim that the desire for business is inherent to humans, who strive for profit in life, close to what they do in business. In general, analysis of the subsequent literature indicated that there were a growing curiosity and study in the field of women entrepreneurship recently documented by several researches (Khan & Kanwa, 2018; Mallick, 2015). However, it was noted that today, entrepreneurial analysis goes beyond looking into whether gender affects the way things change. In certain economic sectors (especially in the developed countries), women are not only majority workers, but also their companies in one way or another shaped the structure of all economies (Asitik & Abu, 2020).

2.3 Empowering Women through Entrepreneurship

Woman entrepreneurs are also seen as women players in overall undertakings and take all chances in integrating capital in a special way to search and find prospects in the field by creating products and services (Yen Ng, et al., 2022; Bastian, et al., 2019; Alkhaled & Berglund, 2018; Rajendhiran &

Masiyamoorthy, 2016). In the same vein, note that women entrepreneurs play an important role, especially in small businesses, for the improvement of economic and social growth (Khan & Kanwa, 2018; Palavi & Cheruvally, 2018). Saiful Islam, (2022), Gupta (2021) and Bastian, et al., (2019) views women entrepreneurs as a new phenomenon because of extreme economic restrictions, increasing aspirations of the sexist population of working women, declining patterns among major businesses and the general sense of enterprise as a solution to several economic disasters in the world.

Similarly, it has been argued that for sustainable development to take place in African countries there is a need to develop an entrepreneurial mind-set of the poor geared towards opportunity search and exploitation. In addition to this, most studies and information about entrepreneurship generally, and in particular about women, come primarily from developed nations and little is understood about women and their companies in developing countries, such as Nigeria (Zapalska, 2017; Minniti, Arenius & Longowitz, 2015; Mitchell, 2014). In specific, as there exist a favourable institutional climate to experience stability in Northern Nigeria, women entrepreneurship should be promoted. The promotion of WE through entrepreneurship

therefore means a lot for the business development which enhances women's economic strength and status in society.

The socioeconomic status of men and women differ significantly in Nigeria. Religious and cultural norms have led to a patriarchal society in which men rule and women submit to their authority. Nigerian women are perceived as a minor and disorganized force that has made little political progress. Economically speaking, they make up the majority of the peasant labor force in the agricultural sector, with the majority of the rest working at the bottom of the occupational ladder in service and domestic jobs (Nurasyiah, et al., 2020). Ezeokafor, et al. (2021) and Aguda- Oluwo and Oni's (2017) findings revealed that social and economic activities of women have significant influence on WE. According to Dixit, et al.'s (2022) findings, social entrepreneurial leadership significantly affects WE. Additionally, it was discovered that financial inclusion significantly aided low-profile rural women in creating their own sources of income and that women's empowerment scores remained higher in urban than rural settings. (Debnath et al. 2019; Islam & Islam, 2018; Muberekwa & Nkomo, 2016). Similarly, Unanam (2020) revealed that women need more empowerment to determine and improve their livelihood.

2.4 Empowering Women through the Cooperatives

The principle to shield economically vulnerable people from abuse by the economically rich has been evolved around the eighteenth century in Europe (Debnath, et al., 2019; Shashikala & Uma, 2019). Cooperatives are democratically-owned and regulated businesses based on self-help, transparency, independence, justice and equity and solidarity principles. The crucial role that women play in society has gained recognition. In the long run, women's contributions to rural development have begun to receive some acknowledgment attributable to succeeding development strategies. Women naturally have a significant part in childbirth, childrearing and socialization and ensuring generational continuity and raising kids in accordance with their cultural background (Ezeokafor, et al., 2021; Asitik & Abu, 2020).

Although cooperation is known to be an organisation that encourages economic interest among its members, it also supports the social element of life and seeks to create a new democratic social order, founded on freedom and equality, in which individuals have a united spirit and economic partnership in peace, care and joint communities (Zapalska, 2017). Cooperatives then build a healthy atmosphere where women improve their trust, recognise their

problems, take decision-making and mitigate risk (Pallavi & Cheruvally, 2018). Women are therefore, motivated and involved in fostering and supporting transforming enterprise and social change.

Empowering women economically increases their access to and prospects for economic wealth. Women's participation in most forms of schools is seen to be poor if women have the same access to competitiveness as men's and women's efforts to help the SDGs to alleviate extreme poverty and hunger figures could decrease the number of hungry people by 12% to 17% (FAO, 2017). Although both men and women can participate in cooperatives, there are typically fewer women in leadership positions and among the membership. Women's cooperatives demonstrate the willingness of women to expand their enterprises, improve their professional abilities and capacity for self-help (Parveen, 2022; Ezeokafor, et al., 2021). The potential outcomes of household cooperatives supporting women's businesses include self-employment, healthy livelihoods, more social respect, and improved women's status (Tariq Khan, Bhat & Sangmi, 2022; Bastian, et al., 2019; Sraboni & Quisumbing, 2018).

2.5 Empirical Review of Related Literature

Many scholars have established that entrepreneurial activities accomplish WE and minimize suffering around the world (Tariq Khan, Bhat & Sangmi, 2022; Dixit, et al., 2022; Bastian, et al., 2019; Nayak & Mahanta, 2019; Varsha, et al., 2019; Sraboni & Quisumbing, 2018). However, none of the reports has examined the entrepreneurial activities, cooperative societies and women's empowerment. In addition to economic, political and social empowerment, very few studies have examined how WE are conducting legal and psychological empowerment (Roopchind, 2020; Nayak & Mahanta, 2019; Shashikala & Uma, 2019).

It has been demonstrated that the advancement of women is crucial for cooperatives, sustainable development and economic expansion (Yen Ng, et al., 2022; Ezeokafor, et al., 2021; Nurasyiah, et al., 2020). Numerous earlier studies have shown that cooperatives and entrepreneurship can foster a secure setting where women can build their self-confidence, recognize their own obstacles, make choices and handle risks. Consequently, women become more independent, active agents of change, businesswomen and advocates for social change who can better their own lives as well as the lives of the community (Tariq Khan, et al., 2022; Yen Ng, et al., 2022;

Asitik & Abu, 2020; Bastian, et al., 2019; Alkhaled & Berglund, 2018; Sraboni & Quisumbing, 2018).

Varsha, et al. (2019) and Rajendhiran and Masiyamoorthy (2016) demonstrated that the empowerment of women is helped by some capacity-building initiatives (i.e. governance formation, technical livelihood promotion, networking promotion, social justice and harmony). Similarly, Shashikala and Uma (2019) indicated that an effort is being made to examine how women empowerment in the study field is accomplished through Micro-credit programme. The study showed that developed micro-credit led to the consolidation of women's emancipation, social unity and socio-economic change for the disadvantaged. Khan and Ali (2016) indicated that women boost economic competitiveness and empowerment by preparation, knowledge and access to credit. The findings of Pallavi and Srihari (2018) suggested that there is a huge impact on the economic status of women and the country's GDP.

3. The Conceptual Framework

In an attempt to clarify the gender problems between women and their men counterparts, Stüwe and Ortner (1974) suggested the idea of the devaluation of women. The theory suggested that women are devalued based on

their society's worth. Moreover, Stüwe and Ortner (1974) indicated that the subordination of women is widespread. They clarified that it is not dedication that gives women their social standing but the way that each society interpret and assess women's ideology. To offer a general reason for the global devaluation of women, then the foundation of women's subordination would be lost if this universal appraisal had improved. She also found that culture is more significant than nature in all cultures. This resulted in a lower status and the loss of economic influence that has been historically unevenly divided between men and women. The result is that women became underestimated. For many decades,

this situation has made girls' schooling worldwide unavoidable. In summary, the devaluation of women theory was considered suitable for the understanding of a comparative analysis of input and output contribution of women to the societies. Therefore, the theoretical framework of this study is based on the integration of the main ideas in the theory of devaluation of women.

A conceptual framework has been constructed to emphasise the variables examined in determining WE with the addition of extra construct to the existing theory. The conceptual framework created and examined in this study is presented in Figure 1 below.

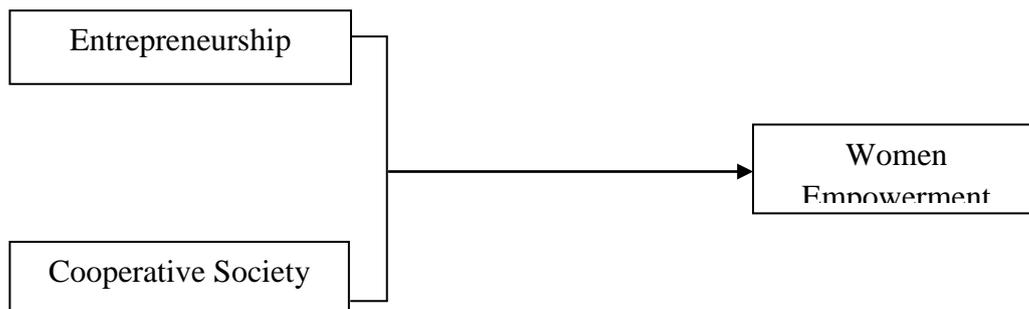


Figure 1: Proposed Conceptual Model

Source: Author's Conceptualisation (2022)

The above model describes the dependent and independent variables. Hence, the independent variables are cooperative society and entrepreneurship (cause) as depicted in the model while the dependent variable is women empowerment (effect). The purpose is to show the level of women

empowerment through cooperative society and entrepreneurship.

4. Methodology

The primary goal of this conceptual analysis is to find out the implication of the association between entrepreneurship,

cooperative societies, and WE in Northwest States, Nigeria. The study's primary goals include reviewing the current literature and developing a conceptual framework and identifying knowledge gap in entrepreneurship and cooperative societies that require further inquiry by taking into account the elements that positively enhance WE. This paper serves as an introduction to describe how cooperative societies, entrepreneurship, and WE are related. It also develops a conceptual framework to illustrate how the study's constructs relate to each other.

5. Conclusion

The paper explored cooperative and entrepreneurial empowerment of women and it was indicated that men were more powerful, largely due to the patriarchal background and the age we live in. However, the challenges of women's empowerment are very nuance and hierarchical, which women overcome in different ways irrespective of race, age, marital status or role in their daily lives. The study also concluded that women's cooperative and entrepreneurial endeavors raise their economic and social status. The encouragement of WE has positive overall effects and may lead to women achieving financial independence, social identity, autonomy, self-confidence, creativity and innovation. However, supporting resources

are needed to properly link the concepts of entrepreneurship, cooperative and women to effectively address gender restrictions and cultural sensitivity that restrict women entrepreneurs' fair access to local markets.

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Exchange Rate and Price Volatility in Nigeria: Implications on Macroeconomic Stability

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Abstract

This research centered on exchange rate and price volatility in Nigeria. Exchange rate and price volatility are becoming serious concern in the Nigerian economy because of their rapid changes and high volatile trend leading to macroeconomic instability. We aimed to empirically investigate volatility of exchange rate and general price level in Nigeria and their effects on macroeconomic stability. The ARCH and GARCH models are employed to check for volatility clustering. The impulse response and forecast error decomposition were derived from VAR to measure interrelationships among the macroeconomic variables which include, parallel market exchange rate (BEXR), consumer price index (CPI) and changes in the gross domestic product (GDP). Results showed presence of volatility clustering in the exchange rate and general price level in Nigeria. The implications are low saving and low investment and diminishing real income leading to vicious circle of poverty. Findings also revealed no significant output responses to both parallel market exchange rate and the general price level. As a result, the two variables might be inefficient policy instruments to stimulate output growth. However, for the import dependent Nigerian economy, the two variables cannot be totally isolated in policy making. Therefore, they surely must be stabilized to achieve stable macroeconomic environment. This requires that the distribution line of foreign exchange from official to parallel market must be thoroughly checked. Import substitution industrialization hinge on commercial production of goods and services within the domestic economy reduces pressure on foreign goods demand, exchange rate demand and consequently enhances stabilization of the entire macroeconomic framework.

Keywords: Exchange Rate, Price Index, Parallel Market, GARCH, VAR JEL Classification Codes: E32, E37, E44, E58

1. Introduction

In an attempt to find feasible solution to stabilize the Nigerian macroeconomic framework, a lot of researchers offered probable solutions which appear not yielding expected outcome when applied. Maintaining a reliable and developed financial system requires stability of exchange rate and general price level. Exchange rate is a key price variable in an

economy and performs dual role of maintaining international competitiveness, and serving as nominal anchor for domestic prices (Mordi, 2006). It is a very important price which governments take very active interest in (Obadan, 2006). This might be one of the reasons why the Nigerian highest monetary authority, the Central Bank of Nigeria (CBN), top-most objective is to maintain price and exchange rate stability

with a view to contribute to the development of Nigeria.

In some of the critical research carried out in the past, (Yinusa & Akinlo, 2008; Adeoye & Saibu, 2014) discussed the implication of exchange rate volatility in the economy. While Yinusa and Akinlo found that currency substitution badly induced volatility of exchange rate, Adeoye and Saibu, on the other hand, established that depreciation of nominal value of macroeconomic variables such as inflation rate, reserves, interest rate and money supply lead to volatility of exchange rate. However, in some recent literature on Nigeria, it appears volatility of oil price and unstable general price levels are the principle causes of volatility in exchange rate (Igbinovia & Ogiemudia 2021; Nuhu 2021). In addition, Onubogu, and Dipeolu (2020) and Ajibade and Ayinde, Abdoulaye (2020) listed factors that induced high prices, particularly, food prices, which include crude oil price, inflation rate and exchange rate among others. Therefore, it appears general price level and exchange rate are crucial factors in macroeconomic stabilization and these two deserve urgent attention which previous authors might have overlooked. As a result, when suggestions were offered and probably practiced, they made no significant positive economic effect.

Moreover, in the previous studies, unlike Clarida and Gali (1994), Echenbaum and Evans (1999), Adebisi and Ogunleye (2009), most authors (Tomori, 2019; Adeoye, 2019; Musa & Ifarajimi, 2022) did not examine the episodic factors in the exchange rate and price movement. Identifying structural breaks allow clearer understanding of trend in historical changes of a variable. It eases the challenges associated with comparing prevailing economic financial activities with a period of relative stability and another period of instability. To buttress the robustness of the empirical study, while it appears many previous analyses were done with yearly aggregate data, monthly data would be obtained for this study and it is anticipated that it produces improved outcomes. Therefore, the paper investigates the volatility of exchange rate and price in Nigeria and their implications on macroeconomic stability in Nigeria from January 2010 to March, 2021.

2. Review of Relevant Literature

2.1 Conceptual Review

Macroeconomic variables are aggregate economic indicators such as interest rate, exchange rate, money supply, gross domestic products and export. Others are investment, national savings, inflation rate and import. The price level is an important

macroeconomic variable being monitored by the CBN. This is imperative because of its relativity to exchange rate and value of domestic currency, income and welfare of the populace. Generally, price is the value of quantity of a commodity or service offered by one party to another. Price gives specific worth of a value embedded in good or service. Unlike the olden days of trade by barter, specific price enhances trade and exchange and make both easy to perform within domestic economy and across international boundaries. The general price level refers to the average price of commodities (composite consumer price index) recorded over time. Changes in the average general price level simply means inflation rate. However, it is deflation or recession if the changes are negative and recurring. Stable price and exchange rate are both crucial to macroeconomic stability.

The concept of exchange rate may implicitly refer to price of imported goods. It may also point to financial and economic prestige of a country. Exchange rate and price can be likened with each other and both can influence consumption, investment decision and the macroeconomic planning

Mordi (2006) stated that exchange rate serves as nominal anchor for domestic prices, and as a result, it can be defined as the price of one currency vis-à-vis another

and is the number of units of a currency required to buy another currency. It means that exchange rate performs dual purpose functions, as a price and as a medium of exchange to acquire foreign goods via foreign currency. For an import dependent country like Nigeria, exchange rate is very crucial for business transaction and generally, price stability. The duty of maintaining stable exchange rate is vested in monetary authority who ensures close watch on the trend in the world and domestic economy in order to set a target for equilibrium rate. Often in a developing country with considerable level of economic openness, when the economy faces shocks and seemingly inefficient management of exchange rate, there might be volatility leading to volatility clustering if not tackled on time.

In their views, Obadan (2006), Mordi (2006), Adebisi and Mordi (2012) attested to the fact that exchange rate variations means the swings or oscillations in the exchange rates for a period of time. It also refers to deviations from a target or equilibrium exchange rate. Exchange rate can be fixed or flexible, but whenever it is not, it is bound to fluctuate. In other words, floating or flexible exchange rates tends to be more volatile. The level of volatility depends on macroeconomic fundamentals (Obadan, 2006; Xie, Chen, & Hsieh, 2021).

This may include the level of financial development, the level of interaction between fiscal and monetary policies as well as the zeal of monetary authority management ability. The concept of short run and long run equilibrium also come to play in exchange rate theory. While the short run may refer to the rate established in a liberalized environment, operating through the interplay of the forces of demand and supply, the long run implicitly refers to a rate that enhances external balances and long run macroeconomic stability (Obadan, 2006; Adebisi, 2007). The purchasing power parity (PPP) is also another concept in exchange rate which researchers such as (Dornbusch (1985); Rogoff (1996); Taylor and Taylor (2004); Xie, Chen, and Hsieh, 2021) explained that the rate a country's currency exchanges for another and would be in equilibrium when their purchasing power is equal. Taylor and Taylor (2004) highlighted that our valuation of a foreign currency in terms of our own mainly depends on the relative purchasing power of the two currencies in their respective countries.

For developing countries and Nigeria specifically, exchange rate volatility has become a serious economic menace and appears to be driving prices rapidly upward, increasing poverty and causing significant macroeconomic instability. Currently,

Nigeria tends to experience more fluctuation in price and depreciation of domestic currency as there appears no fundamental policy in place to halt the wild trend of exchange rate and upward price movement. In this research, we think perhaps, measuring the volatility through ARCH and GARCH modelling may yield improved results unlike in previous studies.

2.2 Empirical Literature

Exchange rate and price volatility seem to have become economic menace in Nigeria presently. A number of studies were conducted and researchers addressed the challenges the two variables may pose to preempt possible negative economic impact. This has become imperative to forestall creating undesirable crushing economic setback capable of alienating Nigeria in the committee of nations. In the actual sense in Nigeria, the issue with exchange rate affecting the economy significantly began with deregulation policy following adoption of Structural Adjustment Programme (SAP) in 1986. With the deregulation policy, determination of oil price, interest rate and exchange rate were implicitly left to the market. Researches in that period were based on whether deregulation affected prices and exchange rate or whether exchange rate affected prices or not. Also discussed were merit and demerit of deregulation of exchange rate. Relevant

literature relative to these arguments include (Obadan, 2006; Mordi, 2006; Adebisi, 2007; Osinubi and Amaghionyeodiwe, 2009; Englama, Duke, Ogunleye and Isma'il, 2010). They also discussed management of exchange rate and various regimes such as regulation and deregulation as well as concessionary exchange rate. As a result, in the post-SAP era, exchange rate appeared to be kept relatively stable with the exception of basically external oil price shocks which caused occasional turbulence.

In the late 2000s, when the seemingly intensive deregulation of the economy began to take its toll on the Nigerian economy, series of research emerged to measure exchange rate impact on the economy with a view to offer suggestions that may improve macroeconomic framework. Researches in that period appeared to have been induced by privatization and commercialization of public enterprises as well as merger and acquisition in the financial sector. The persistent external oil price shocks was also among research topics. The frequent changes in crude oil price appeared to have resulted in frequent upward movement of domestic product prices and exchange rate and consequent rise in general price level. The resultant incidences were macroeconomic instability and further price distortion. Literature from that period till now focused on management of exchange

rate and its impact on economic growth under deregulation. They also discussed floating exchange rate and macroeconomic variable factors. Some of these literature include (Ammani, 2012; Ngerebo & Ibe, 2013; Adeoye & Saibu, 2014; Nkoro & Uko, 2016; Lawal, Somoye & Babajide, 2016). Such research also discussed floating exchange rate, optimal exchange rate system, whether retail and wholesale Dutch auction system. This again offered an insignificant solution as exchange rate trend continued upward movement and thereby driving inflation rate high.

The bottom line is that many of the post-SAP era literature focused on effect of exchange rate on macroeconomic variables and the real sector and the debate continued till the present time even as devaluation of naira continues. For instance, while Ammani (2012) examined the effect of exchange rate on the agricultural sector using cotton production as an example, Ngerebo-a and Ibe (2013) examined the effects of exchange rate on balance of payments, GDP and inflation rate. Their findings were not significantly different from Adeoye and Saibu (2014), who examined the effect on macroeconomic variables; that exchange rate actually has relationship with some macroeconomic variables such as interest rate and prices but has no significant relationship with the real sector like cotton

producing industry. They explained that more cotton were produced after SAP and more are still being produced and that this is a similar trend in the real sector.

In some of the recent literature, the focus seemed to be on economic integration and level of openness. Some of these are Barguellig (2018) and Boubakri, Guillaumin and Silanine (2019). While Barguellig's (2018) findings emphasized the need for a country's substantial financial integration to enhance relative, stable and real exchange rate and macroeconomic framework, Boubakri, Guillaumin and Silanine (2019) on the other hand, established that flexible exchange rate regimes and extreme financial openness would aggravate volatility of exchange rate and prevent economic stability. Other recent literature have multifarious outcomes which also focused on effect of exchange rate on food prices, oil prices and inflation. Some in these category are Ajibade et al (2020) and Nuhu (2021). They found that while exchange rate drives food prices, equivalently, oil price shock also drives exchange rate. In another review on volatility of exchange rate, Ahmadi and Manera (2021) findings for developing countries and emerging economies revealed volatility clustering common mostly as a result of oil price shocks. They suggested that government policy on macroeconomic

planning in such region with oil endowment should understand the fundamental causes of its disparities and the state of the economy. Given these diverse research findings, one may conclude that oil price shocks and monetary policy making play key role in volatility of both exchange rate and the general price level in Nigeria.

As an innovation in this research, the parallel market rate and its interaction with the consumer price index and aggregate economic performance are examined. There appears a new development in the Nigerian foreign exchange market in recent time which sends signals to prices and output. It seems the parallel market rate is becoming obvious and has a noticeable impact. For the Nigerian economy, there must be a peculiarity about the parallel market foreign exchange activities demanding a thorough examination. In most literature, the official rate is often preferred to parallel market rate may be as a result of unavailability of reliable data. Nevertheless, for over a decade the CBN has been presenting a reliable data on the parallel market (as a variable) thereby enhancing reliable and researchable thesis on the subject. The parallel market (Bureau de change) appears a large market in Nigeria where foreign exchange transactions take place significantly. This may be the result of the fact that Nigeria has a large informal

sector with non-negligible volume of economic transactions.

2.3 Trend in Macroeconomic Policy Instruments in Nigeria

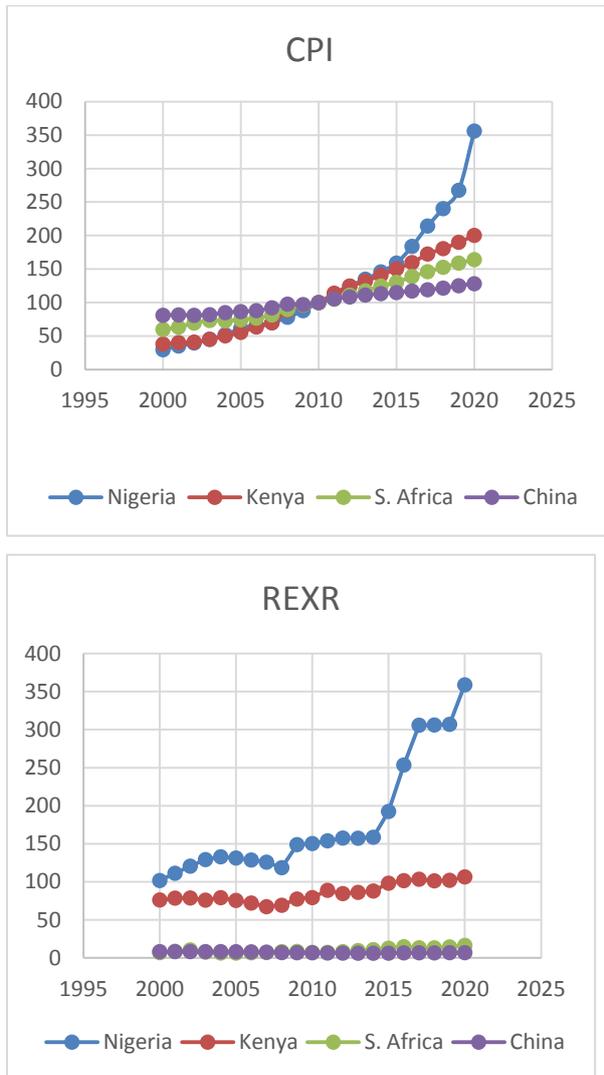


Figure (a): Annual Consumer Price Index (CPI) of Developing and Emerging Economies, (2010=100) Figure (b): Real Effective Exchange Rate (REXR) of Developing and Emerging Economies
 Source: Author's Computation Based on WDI Data

The consumer price index (CPI) and real effective exchange rate (REXR) of developing countries and emerging economies are illustrated in Figures A and B. It can be seen from Figure (a) that although, CPI for selected countries showed

upward trend from year 2010, but the Nigeria's CPI, rised rapidly and higher than other countries in whatsoever, period one might signify. Meanwhile, in Figure b, while REXR appeared relatively stable in other countries, including sub-Saharan

Kenya, but in Nigeria, the variables rapidly shot upward from year 2015 and raised to about 370 naira to 1 US dollar in 2020. The episodic rise in exchange rate and the sudden acceleration from 2015 to 2020 might be a clear indication of improper management of macroeconomic policy framework in Nigeria. Meanwhile, the parallel market, where average citizens perform daily foreign exchange transaction, is higher than the “real effective rate”. Looking at Kenya, although exchange rate is relatively higher than emerging economies

like South Africa and China, but stability of the variable is attainable. Therefore, it means a comparatively stable Kenyan macroeconomic outlook, based on key economic indicators like exchange rate and price movement, might attract more foreign investors while Nigeria’s seemingly unstable economy remains unattractive. Exchange rate trend in Nigeria from 2010 clearly indicates how volatile the market rate has been, and probably the major driver of prices and economic instability.

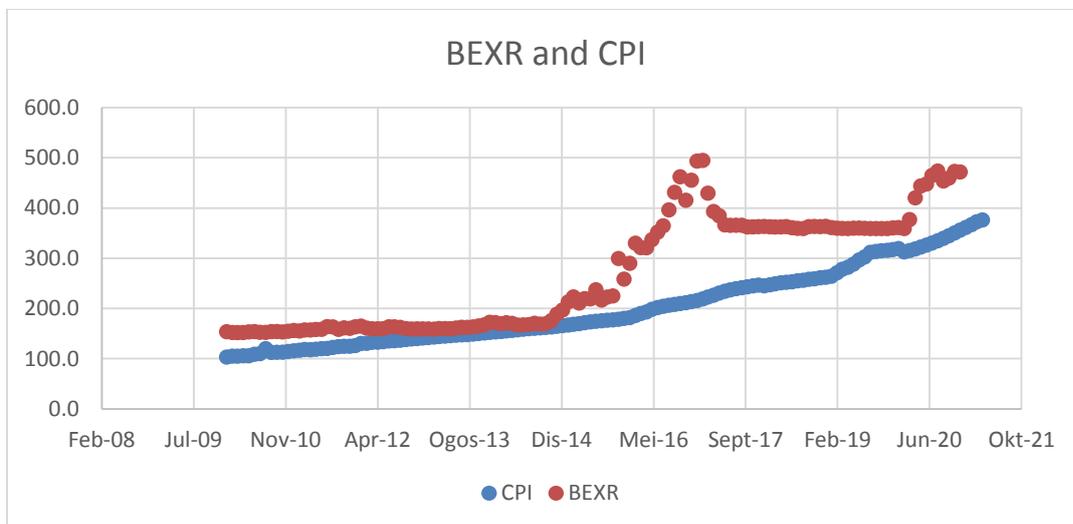


Figure c: Exchange rate trend at the bureau de change

Source: Author’s Illustration Aided by CBN Statistical Bulletin, 2020

Figure C showed exchange rate and price trend. While it appeared exchange rate is relatively stable from 2010 to 2014 and third quarter of 2016 to first quarter of 2020, general price level continued to display upward trend. Nevertheless, whether

exchange rate was stable or volatility, prices were high in either episode, it means that exchange rate might be a key factor, but might not be the only principle determinant of price movement in Nigeria.

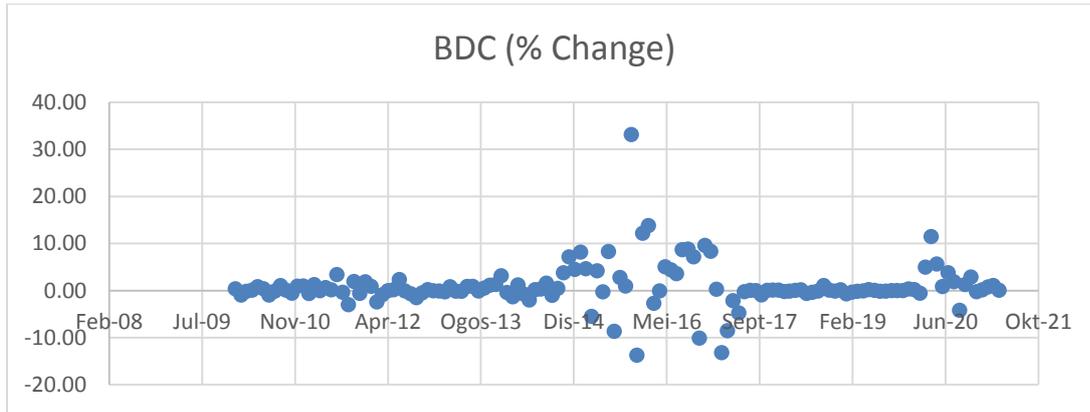


Figure d: Scatter plot of monthly percentage change in exchange rate at the Bureau de change, Nigeria

Source: Author's Illustration Aided by CBN Statistical Bulletin, 2020

Examining a scatter plot for the parallel market denoted by (BDC), Figure d, we noticed instability or high volatility between 2014 and 2016 and low volatility between 2017 to early 2020. This was eventually followed again by period of high volatility in early 2020 to mid-2021. However, before

these periods, we noticed a period of low volatility from year 2010 to early 2014. Theoretically, the implication of volatility clustering is to lay foundation implicitly for future economic instability. This might be the case currently experienced in Nigeria and it demands urgent attention.

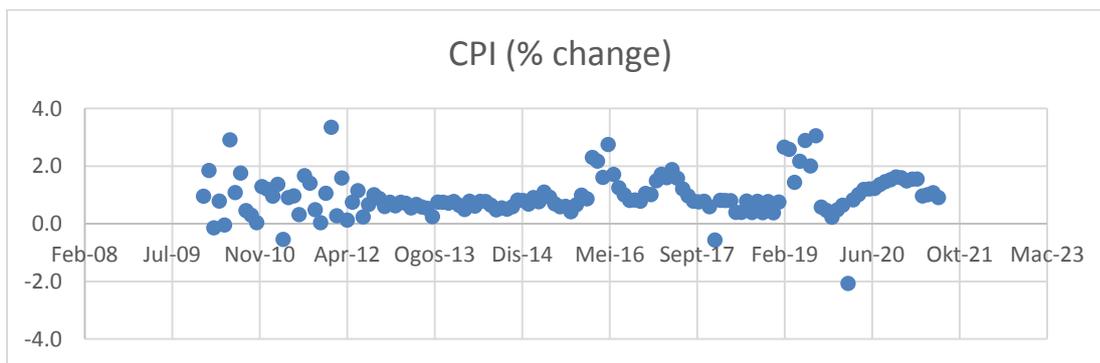


Figure e: Scatter plot of Monthly percentage change in in consumer price index, Nigeria.

Source: Author's Illustration Aided by CBN Statistical Bulletin, 2020.

The distortion in general price level is illustrated in scatter plot in Figure e. It is difficult to fit a straight line for the graph. This emphasizes how difficult it might be to predict price in Nigeria. It is believed by

average Nigerians that price moves with exchange rate and that whenever exchange rate rises, price also rises. Equivalent notion is established in the trend shown in Figure c. However, in this research, we assumed there

are other key macroeconomic or stochastic variables responsible for price rapid movement in Nigeria. For the stochastic variable, the recent outbreak of Covid-19, which negatively affected the economies of the whole world, might be a principle factor. With the outbreak, it appears the economies of developing countries are hard-hit by the shock more than the industrial countries.

3. Methodology

The trend analysis in section two depicted some elements of volatility of exchange rate and price which need to be tested empirically. The empirical methods for testing volatility clustering were undertaken. These include the autoregressive conditional heteroscedasticity (ARCH) and the generalized autoregressive conditional heteroscedasticity (GARCH) models developed by Engle (1982) and popularized by Engle and Bollerslev (1986). ARCH and GARCH models capture volatility clustering although GARCH might perform better than ARCH model. The process include testing for ARCH effect to ascertain the volatile condition of exchange rate and price in Nigeria. If the alternative hypotheses (of the presence of ARCH effect) for the two variables: monthly exchange rate at the parallel market (BEXR) and the monthly change in consumer price index are accepted, then we proceed to testing for GARCH effect.

In addition, responses of output change to the two variables would be examined. This requires the vector auto-regression model (VAR) developed by Sims (1980), Sims (1986) and Sims, Stock and Watson (1990). The method permits measurement of interrelationship among variables and concurrent estimation of the variables. The impulse response function and forecast error decomposition obtainable in VAR make possible the measurement of shocks from one variable to another and variable responsible for errors in another variable in a particular period. Time series data used for the regression analysis were obtained from the CBN Statistical Bulletin, 2010-2020. However, some data used for some graphical illustrations were obtained from the World Bank World Development Indicators (WDI).

Model Specification

The ARCH and GARCH models are specified in this section. A simple VAR model is also presented to obtain impulse response function and the forecast error (variance) decomposition. These methods have been employed by Oyinlola and Egwaikhide (2011), Ajibade et al (2020) and Nuhu (2021). Following the objective of this study, the following variables shall be employed: exchange rate at the parallel market represented by the bureau de change (BEXR), consumer price index (CPI) and

changes in Nigerian national output (GDP). Monthly data obtained from the CBN Statistical Bulletin, 2020 was presented for the regression analysis. Except for the variables employed in empirical analysis, the methodology and estimation techniques used by the authors stated above were equivalent. The empirical model set by Oyinlola and Egwaikhide (2011) gave a brief highlight of the authors' work, a vector error correction model (VECM) stated in equation (1) below: (detail check in Oyinlola & Egwaikhide, 2011).

$$\Delta y_t = \alpha \beta' y_{t-1} + \sum \Gamma_i \Delta y_{t-i} + \pi + \zeta_t = 1, \dots, T \quad (1)$$

Where y_t is a vector of endogenous variables which include domestic price, exchange rate, money, income and world export price. α is parameters measured by the speed at which the variables in the system adjust to their long run equilibrium values. β' vectors are estimates of the long run co-integrating relationships between the variables in the model. π is the drift parameter and ζ_t the error term. The long run equation is stated thereafter. While VECM as assumed in Oyinlola and Egwaikhide's work would produce improved result over VAR, in the current article, since co-integration test was not achieved, unrestricted VAR was adopted to obtain impulse response and forecast error decomposition. Moreover, testing volatility

clustering with monthly data from January, 2010 to December 2020, in the Nigerian market is the major objective. Estimation exclude testing for long run effect. Therefore, the ARCH and GARCH were adopted to measure the volatility clustering among the macroeconomic variables of interest (BEXR and CPI). GDP was introduced in VAR estimation. The BREX was rarely used in previous studies which might be due to dearth in reliable data availability. Nevertheless, VAR (impulse responses) suggest to a degree what might happen in both short run and the long run as a result of innovations or shocks.

For this study, model specification begins with the ARCH mean equation and extended to GARCH having achieved ARCH effect.

The Mean Equation

Generally, the ARCH model is usually preceded by the mean equation

$$\chi_t = \Psi Z'_t + \varepsilon_t \quad (2)$$

Equation (2) represents the mean equation for the conditional mean of χ_t given Z'_t where χ_t is a dependent variable and Z'_t is a set of regressors, Ψ is a parameter and ε_t denotes shocks or innovations. Note that:

$$\varepsilon_t = \varrho^t \phi_t \quad (3)$$

Where $\phi_t \sim NIID(0,1)$

The equation for the conditional variance of ϱ^t is given as:

$$\varrho_t^2 = \gamma_0 + \delta \varrho_{t-1}^2 + e_t \quad (4)$$

$$\gamma_0 > 0; \delta \geq 0 \quad 5$$

Equation (4) represents the ARCH(1) effect where null hypothesis, ($h_0 = 0$) and alternative hypothesis ($h_1 \neq 0$), which signify homoscedasticity or heteroscedasticity respectively. In equation (5), the GARCH (1,1) model is stated:

$$\sigma_t^2 = \gamma_0 + \delta \rho_{t-1}^2 + \delta \varepsilon_{t-1}^2 \quad (5)$$

Equation (5) depicts the variance of two models are equal (γ_0 and $\delta \varepsilon_{t-1}^2$) where the variance of the error term (ε_{t-1}) is predicted using the variance value of the error term in year $t-1$.

For variables for this study to replicate ARCH model, equation (6) is presented below:

$$\chi_t = \beta_1 \text{BREX}'_t + \beta_2 \text{CPI}'_t \varepsilon_t \quad (6)$$

where χ_t is a dependent variable and BREX'_t and CPI'_t are set of regressors, β_1 and β_2 are parameters and ε_t denotes shocks or innovations. The ε_t in equation (6) is the variable of concern, the error term. In addition, in ARCH and GARCH as well as any other variance measurement method like TGARCH and EGARCH, the modelled is on the

conditional variance. In other words, the concern is on the degree of variance in the market, for instance; the ε_t in equation (2) becomes " $\varepsilon_t = \rho^t \phi_t$ " as stated in equation (3).

To capture the impulse response function, we state equation (7) as an auto regressive linear equation to be estimated as unrestricted VAR and obtained the impulse responses.

$$y_t = \theta_0 + x_t[L]y_{t-1} + \varepsilon_t \quad (7)$$

Where x_t is an exogenous variable, $\theta[L]$ is a matrix polynomial in the lag operator of variables, y_{t-1} is the lag value of exogenous variable, ε_t is the vector of estimated shocks for each of the monetary policy variables. We assumed ε_t is serially uncorrelated. The VAR specification in the context of this article, expressed in multivariate AR (1) to examine the contemporaneous impact of shocks, is specified as followed:

$$GDP_t = \vartheta_0 + \sum GDP_{t-i} + \sum BEXR_{t-i} + \sum CPI_{t-i} + \varepsilon \quad (8)$$

$$BEXR_t = \vartheta_0 + \sum BEXR_{t-i} + \sum GDP_{t-i} + \sum CPI_{t-i} + \epsilon \quad (9)$$

$$CPI_t = \vartheta_0 + \sum CPI_{t-i} + \sum BEXR_{t-i} + \sum GDP_{t-i} + \mu \quad (10)$$

4. Empirical Results

This section presents results of the empirical testing of ARCH and GARCH effects.

4.1 Volatility Measures in Nigeria

Table 4.1. ARCH Effect Variance Equation

Dependent Variable = RETURNSONBEXR				
	Variance Equation			
C	0.00142	6.65E-05	21.47717	0.0000
	8			
RESID(-1)^2	0.17147	0.115297	1.487277	0.1369
	8			

Source: Author’s computation with e-views 10, based on data from the CBN

The variance equation of the ARCH model was presented in Table 4.1. It can be observed that the coefficient of the variance equation is positive, representing evidence of volatility of exchange rate in Nigeria and in particular, the parallel market where small scale dealers and their customers can easily obtain foreign currency. Table 4.2 contains heteroscedasticity test for the model.

Table 4.2. Heteroscedasticity Test on Return on BEXR

Test: ARCH				
F-statistic	7.251129	Prob. F(1,128)		0.0080
Obs*R-squared	6.969604	Prob. Chi-Square(1)		0.0083

Source: Author’s work based on data from the CBN

The test result showed rejection of null hypothesis of no ARCH effect because the Prob. Chi-Square (1) is equal to 0.0083, significant at 1%. We then proceed to GARCH effect which is expected to generate further result for a more reliable suggestion.

Table 4.3. Variance Equation for the GARCH Effect

Variance Equation				
C	0.000146	3.80E-05	3.830253	0.0001
RESID(-1)^2	0.148782	0.0306	4.862122	0.0000
GARCH(-1)	0.598782	0.0651	9.193123	0.0000

Source: Author’s work based on data from the CBN

The GARCH model result was presented in Table 4.3. The result revealed a clearer outcome of BEXR volatility measure. The coefficient of GARCH model was larger than the ARCH model which further explains volatility clustering in the parallel market. The sum of the two coefficients (residual and GARCH (1) model) is equal to 0.74756, indicating a long run volatility in the market.

Table 4.4. Heteroscedasticity Test (GARCH Effect) RETURNSONBEXR

Heteroscedasticity Test: ARCH

F-statistic	0.170610	Prob. F(1,127)	0.6803
Obs*R-squared	0.173064	Prob. Chi-Square(1)	0.6774

Source: Author's work based on data from the CBN

In testing for heteroscedasticity, the null hypothesis of no heteroscedasticity is accepted. It means the GARCH model truly states the volatile nature of the market. Therefore, there is a need for the Nigerian monetary authority to check this economic challenges to prevent further potential damage to the macro economy.

Table 4.5 GARCH Variance Equation on Returns on CPI

	Variance Equation			
C	2.91E-06	6.85E-07	4.250064	0.0000
RESID(-1)^2	0.178612	0.058741	3.040682	0.0024
GARCH(-1)	0.757021	0.042789	17.69178	0.0000

Source: Author's work based on data from the CBN

Table 4.5 displayed the GARCH variance equation where the coefficient results are improvement over ARCH effect. The consumer price index in Nigeria appears to be adversely affected by the exchange rate volatility. We also empirically established volatility clustering in general price level in Nigeria. The heteroscedasticity test shows evidence of minimum variance for the model set.

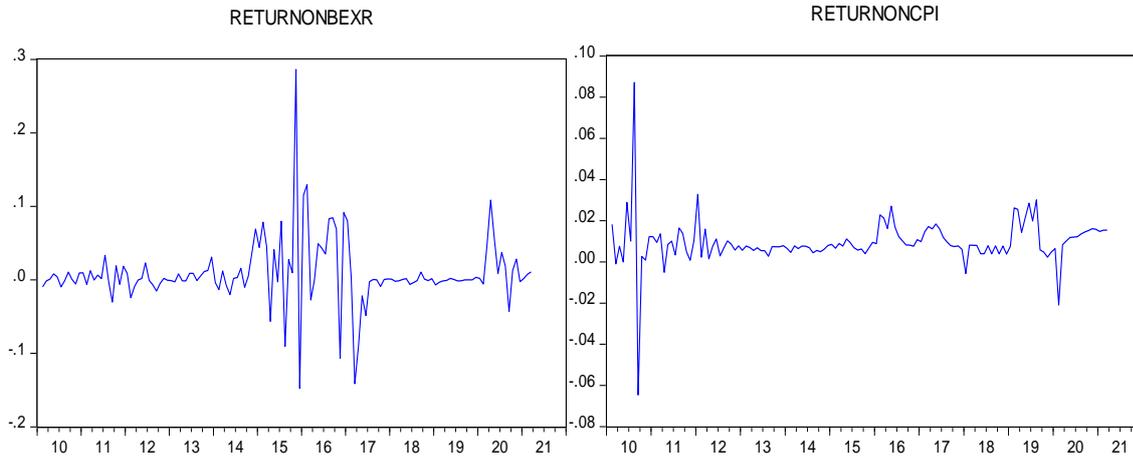


Figure (f): Returns on REXR

Figure (g): Returns on (CPI)

Source: Author’s Computation Via E-views 10, Based on CBN Statistical Bulletin, 2020-2021

The volatility of the general price level and parallel market (bureau-de-change) were displayed in Figure (f) and Figure (g). They showed evidence of volatility clustering within the year (monthly observations) under review. There is evidence of volatility clustering in returns on parallel market exchange rate. It began with period of low volatility from January 2010 to March 2014. This was followed by period of high volatility from second half of 2014 to last quarter of 2016 and followed by another period of low volatility from January 2017

to October and November 2019. This again was followed by another period of high volatility till 2021. Volatility clustering was also depicted in the CPI. It started with period of high volatility to low volatility till the last quarter of 2018 after which a period of high volatility followed. All these clearly illustrate how unstable the Nigerian macro-economy is, reflecting a probable poor macroeconomic management. We signify that the unpredictable price and volatile exchange rate can increase risk and uncertainty and consequent reduction in investment demand and discourages prospective investors.

4.2. Impulse Response Function

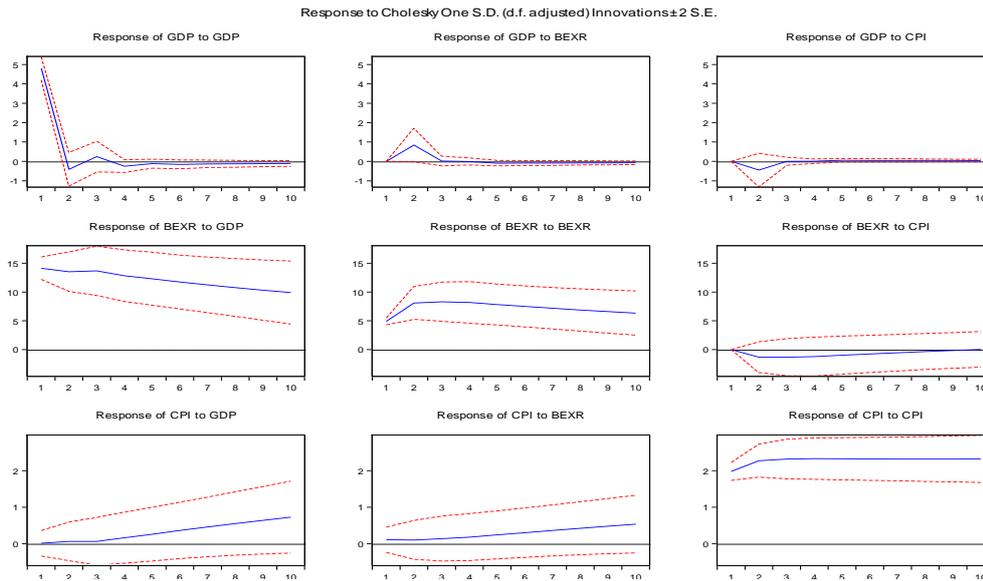


Figure (h): Impulse response function

Source: Author's Computation Based on data from CBN Statistical Bulletin, 2020-2021

It is noticeable from figure (h) that at the beginning of the period, GDP showed response to shocks (from BEXR and CPI) but as from the third period, it showed no response any more. One may conclude that exchange rate and price policies do not have

significant effect on annual output changes in the long run. The variance decomposition is presented in Table 4.6, which allows us to determine factors responsible for variation in each variable

4.2.1 Variance Decomposition

Table 4.6. Variance Decomposition (BEXR)

Period	S.E.	GDP	BEXR	CPI
1	14.9683	89.3087	10.6912	0.0000
2	21.7767	80.7843	18.8477	0.3678
3	27.0620	77.8858	21.6307	0.4834
4	31.0748	76.1432	23.3356	0.5210
5	34.3426	75.1978	24.2931	0.5090
6	37.0681	74.5819	24.9382	0.4799
7	39.3986	74.1660	25.3892	0.4446
8	41.4201	73.8629	25.7274	0.4096
9	43.1946	73.6324	25.9894	0.3780
10	44.7667	73.4490	26.1989	0.3520

Source: Author's work based on data from the CBN

It can be noted in Table 4.6 that GDP is responsible for 73% to 89% of variation in BEXR followed by the BEXR own shocks. However, own shock determines over 90% of variation in CPI and GDP. There is a strong economic relationship between GDP and BEXR in Nigeria, increase demand for output, probably as a result of rise in population that leads to increase demand for goods and services much of which are bound to be imported goods. This in turn,

puts pressure on demand for foreign currency. In other words, the Nigerians penchant for foreign goods (manufacture goods) and services (medicals, education and shopping) would exerts upward demand on foreign currencies and this would be self-perpetuating, leading to devaluation of domestic currency. The situation then becomes a vicious circle, worsening macroeconomic framework.

Table 4.7. Variance Decomposition (CPI)

Period	S.E.	GDP	BEXR	CPI
1	1.9837	0.0036	0.3060	99.6903
2	3.0210	0.0452	0.2498	99.7049
3	3.8113	0.0570	0.2922	99.6507
4	4.4737	0.1774	0.3766	99.4458
5	5.0554	0.4072	0.5237	99.0690
6	5.5841	0.7583	0.7245	98.5171
7	6.0757	1.2144	0.9728	97.8127
8	6.5408	1.7635	1.2599	96.9765
9	6.9863	2.3912	1.5786	96.0300
10	7.4173	3.0847	1.9225	94.9927

Source: Author's work based on data from the CBN

From Table 4.7, CPI own shocks is responsible for variation in CPI, ranges between 94.99% and 99.69%. It means prices in the current period are mostly driven by prices in the previous period in Nigeria. Therefore, it follows logically that rapid movement in the current price level would accelerate prices in the next period; and obviously likely to rise faster than the growth of real national income and personal disposable income. Nonetheless, the key indicator of this repeated cycle is hyper-inflation which cripples the national

economy and forcing people into vicious circle of poverty. Nigerians seem to be experiencing hyper-inflation in the contemporary period due to rapid changes in price, defying monetary authority combating efforts.

5. Conclusions

This article examined exchange rate and price volatility in Nigeria, covering monthly data from January, 2010 to December, 2020. Our main objective was to find empirically if volatility of exchange rate and price

actually exist in the Nigerian economy and the implication it tends to portend on macroeconomic framework. The trend in price and exchange rate in Nigeria today appears unbearable for economic agents and this calls for concern. While VAR was employed to derive impulse responses and variance decomposition, ARCH and GARCH models were developed to check for volatility clustering. Evidence of volatility clustering was established in both parallel market exchange rate and the general price level. The price volatility confirms Ajibade et al. (2020) and it is equivalent to Oyinlola and Egwaikhide (2011) and Nuhu (2021) who established volatility of exchange rate, in the long run, affects domestic prices as well as inflation. This means that effect of volatility of exchange rate and prices has long been a critical issue in macroeconomic stability in Nigeria, that is, the country has long been experiencing volatility clustering in both price and exchange rate. However, the current spate of large recurring volatility clustering (year 2019, 2020 and 2021) seems abysmal and devastating for the entire economy. Household income depreciating faster than possible adjustment tendency. The result is declining expectations, low saving, low investment and increasing poverty. Macroeconomic instability is also a noticeable outcome.

Impulse response functions and variance decomposition were derived from VAR. It is aiming at finding exchange rate and price movement affect the totality of the economy measured by changes in output. Results showed that although both the parallel market rate and price level are unstable and might be inappropriate as policy instruments, but unavoidably, they must be used particularly in the Nigerian economy. In other words, efforts to make them stable is crucial to the macroeconomic framework. Moreover, it appeared from the findings that the Nigerian economy might unamenable to domestic and exchange rate pricing policies which may be due to excessive openness to external shocks the weak macroeconomic framework cannot absorb. In addition, that the output is responsible for 73% to 89% of variation in BEXR suggests a significant causal relationship between output and the parallel market. It proved that the parallel market is, indeed, the place where real economic transactions take place in Nigeria. However, since the country is habitually import dependent the household and small scale businesses always depend on the parallel market where they can obtain foreign exchange at ease for transactions.

It is suggested therefore that there must be efforts to stabilize price and exchange rate, particularly at the parallel market for the purpose of macroeconomic stability. There

must be a concerted and well-coordinated efforts focusing on reducing demand pressure on foreign exchange. Nigeria needs to improve on her production capacity, embark on import substitution industrialization to produce many of the imported goods at home. There should be national orientation towards changing of socio-economic life; Nigerians must stop or reduce considerably, the penchant for foreign products and services which include frequent oversea medical trips and education bills. These two factors as well as excessive demand for imported goods, especially among the elites, exert significant pressure on foreign exchange which usually drive exchange rate upwards. The distribution line of foreign exchange from official to parallel market must be thoroughly checked. Any fraudulent practices must be brought to book and those found guilty punished. With reference to stabilization of general price level, it appeared price control is almost impracticable in the current dispensation of liberalization, but to some extent, prices can be monitored or checked by relevant agencies. Moreover, price of a consumer good sometimes falls when supply increases, therefore, large scale production driven by government assistance, such as subsidies enhance massive production. Commercial production in the organized private sector within the domestic economy may be of great advantage. In other words, substantial

domestic production is crucial for stabilization of exchange rate and general price level in the Nigerian economy.

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Gender Discrimination and Employment Decision in Selected Nigerian Banks

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Abstract

Discrimination has been observed to be a cankerworm that had eaten deep into the fabric of most workplaces particularly in the developing countries like Nigeria and this has resulted in the inefficient hiring and promotion practices. Based on this, this study investigated the impact of gender discrimination on the employment decision in the selected Nigerian Banks, with a focus on First Bank Ltd., Guarantee Trust Bank, United Bank for Africa, and Wema Bank Plc. located at the Federal University of Technology, Akure (FUTA). The research adopted a structured questionnaire as the data collection's instrument. It applied descriptive statistics consisting simple percentages and tables and used inferential statistics for linear regression analysis. The results of the study established a significant impact of: (i) socio-cultural norms on the employment decision; (ii) sexual harassment on the employment decision. The study concluded that there was significant impact of gender discrimination on the employment decisions in the selected Nigerian banks. The study therefore, recommends the adoption of a strategy and implementation of a policy capable of narrowing the gender pay gap in the banking industry and as well, intensifies openness at work through publication of information on the living wage's vows and sex-disaggregated rewards.

Keywords: Employee's Commitment; Employment Decision; Gender Discrimination; Gender Disparity; Job Satisfaction.

1. Introduction

Human resource management encompasses staffing, training, development, and motivation of workers (DeCenzo & Robins, 1998). These are key aspects that assist employees in having a sense of belonging to the workplace especially at this time that women's participation in the workforce grows on a daily basis around the world (Udeorah & Vincent, 2020). However, in accordance to the consensus of writers

provided in various studies, women are reported to have faced discrimination at every level of management in the workplace. For instance, it is observed that there is gender discrimination and a glass ceiling in organizations (Eboh, 2021). Therefore, it is consequently critical for enterprises to comprehend gender prejudice for the reason that this is a competitive era, and it is only firms capable of proactively managing rivalry that are bound to survive

in the modern world of work. (Ensher, Grant-Vallone & Donaldson, 2001).

The issue of discrimination at work has received extensive discussion at all societal levels including family, workplace, government institutions, and all spheres of human endeavour as the need to close the gender gap at work has come under scrutiny, thus, increasing interests in and conversations about this subject over time (Yaza et al., 2020). Specifically, it is debated that since women constitute half of the population, they should also be made to comprise half of the workforce. This is for the reason that it is important to encourage women to enter the workforce and more importantly, to keep them there by giving them different chances to move up the career ladder (Yaza et al., 2020). Nowadays, the workforce has shifted from homogeneous to heterogeneous, necessitating management diversity, which means establishing a heterogeneous workforce capable of performing to its full potential and in an equitable work environment in which no individual or group of individuals has an advantage or disadvantage over others.

As a result, managing diversity at work is critical for any firm, particularly in this era of globalization as it is required to eliminate unjust discrimination and so enable

employees to compete on an equal footing. Gender discrimination is a fundamental social phenomenon that has sparked a heated discussion over assigning social positions to human civilizations. Gender is concerned with the psychological, social and cultural distinctions between male and female. Male and female have various physical qualities, attributes and personalities, in addition to diverse psychological characteristics. Individual content behaviour, according to Triandis (1994), is a result of both socially enforced laws and values and individual inclination, whether genetic, unconscious or conscious. Cultures and civilizations are dynamic and ever-changing, yet there has been much discussion about how, and how quickly, they may change.

Creativity may eventually lead to changes in the laws and values. Since people have widely varying opinions on how much gender depends on biological sex, such discussions are especially contentious when they involve the gender/sex system. A person develops a gender identity early and once a youngster has one, he or she starts to build gender roles in which men and women are not only distinct but also valued and measured. The masculine traits tend to lean toward hardness, aggression and independence, whereas the feminine features emphasize delicacy, dependence, emotionality, nurturing and language

abilities (Alamveabee, 2005). As a result of these implied inequalities between men and women, society frequently gives men more difficult work and assigns women more suited or less demanding tasks (Pearson, 2000).

Gender discrimination results from ongoing inequity between men and women in many aspects of life (Jannatul, 2011; Eboh, 2021). Gender discrimination is defined as treating people differently in the workplace based on whether they are a woman or a man (Busse, 2003). As defined by the International Labour Organization (ILO, 2003), discrimination occurs in various forms in everyday life. Any distinction, exclusion, or preference made on the basis of race, color, sex, religion, political opinion, natural extraction or social origin that has the effect of nullifying or impairing equality of opportunity and treatment in employment or occupation is discriminatory.

However, employment is a partnership between two individuals, one of whom is the employer and the other is the employee, typically based on a contract (Kaifi, 2013). It is also described as a contract between an employer and employee that specifies the employee's commitment to performing specific services while on the job and at the employer's designated workplace in order to support the accomplishment of the

organization's goals and mission in exchange for payment. Employer decisions extend beyond deciding whether workers are eligible for raises. As a result of regular objective performance reviews, managers obtain information to make and implement choices about promotions, transfers, demotions, separations, and remuneration within the banking sector. High performing employees are acknowledged and promoted in most organizations for their hard work and outstanding performances since promotion often implies rewarding an employee's efforts by moving that individual to a role with increased authority and responsibility (Chia,2018).

In Nigeria during the late nineteenth and early twentieth centuries, banking job was mostly a male occupation, as all bank tellers were male; women filled the roles left vacant by men as the banking industry grew and more responsible positions were formed (Chia, 2018). As the status of the tellers that men occupied decreased, more women took those positions, and now most bank tellers are women (Iloegbunam, 2006; Chia, 2018). As a result, the study sought to determine the impact of gender discrimination in banks and how this influences employment decisions in Nigeria, specifically within the Akure metropolis.

Statement of the Research Problem

All significant international human rights' accords and agreements regard equality as a fundamental human right. Therefore, everyone is entitled to all the freedoms outlined in this declaration without regard to race, color, sex, language, religion, political or other opinions, national or social origin, property, birth or any other status, according to article 2 of the 1948 Universal Declaration of Human Rights (Pitt, 2011). However, discriminatory behaviours are common in today's communities as conflict theory defines discrimination as the deliberate exploitation of members of inferior groups by members of privileged groups in order to protect or advance their own interests (Reskin, 2000; Rahaf & Ahmad, 2019).

The International Labour Organization (ILO) has been working for women's rights since 1919; and in 1979, ILO started the campaign for women's equal pay and all eliminations of all forms of discrimination against women in the workplace (ILO, 2014). Woman status has been improved in the western world in past 150 years, but inequality between men and women still exists. In the 1970s to 1980s, women labour force started to increase in organizations (Lorber, 2000). However, the declining in gender inequality started over the past half century as in 1920s, women started to enter

into top leading positions, while the gender wage gap and gender segregation both started to reduce in the United States and Western Europe from 1980s and wage gap and gender segregation always remained low in the United Nations and Europe (Blau, Brinton & Grusky, 2008).

According to Oakley (2000), women were severely under-represented in senior executive positions in 1995, as they accounted for 3 to 5 percent of top executive positions in the top 1000 workplaces and 500 large American establishments inclusive of banking sector. Thus, implying that almost all senior executive slots were filled by men and similar women's representation in senior positions was found in European countries. Also, Parker, Pascall, and Evetts (1998) claimed that women do not have equal opportunities in executive positions because it was discovered in 1995 that men dominated senior management positions while women were at lower levels.

In the mid-1980s, the banking sector in Nigeria hired both men and women with the same education and experience, but women were discriminated against and given lower-level employment than men (Parker, et al., 1998). Women have struggled to work in organizational hierarchies in the banking sector, yet reasons such as glass barriers, organizational culture and stereotype acts

continue to cause women's under-representation in senior executive positions (Kamkatwong & Kleiner, 2001). Furthermore, despite equal education and experience, the glass ceiling in the workplace prevented women from achieving top executive positions in 1990. (Parker, Pascall & Evetts, 1998). However, women were confronted by discrimination in the banking industry due to gender segregation, class restrictions, dearth of job training, deficiency in term of experience, lack of education and a ban on marriage as female bank managers are split into smaller branches and do not play a decision-making role (Berdahl & Moore, 2006).

In line with Holmberg (2013), occupational segregation still persists in the banking business and as a result, women continue to earn less than men, despite the fact that women are promoted in every commercial bank, both horizontally and vertically. As a result, women were under-represented in the commercial banking industry from the 1910s through the 1960s, as men held high executive positions in the workplace. While women faced discrimination in the banking industry and in general organizations till date (Aroosh & Khalid, 2014). According to Moulders, Plasman, and Rycx (2004), multiple researches on gender inequality have been undertaken and these studies revealed that gender inequality still exists in

various businesses, including the banking sector to this day. According to these studies, gender disparity in the workplace has decreased in extent, but remains unresolved. Organizations continue to treat both genders differently since some males are better paid and have more career prospects than women in the same occupation (Alvesson & Billing, 1997; Sohaib, 2015). Thus, employees become emotionally fragile, and simple peace-loving employees become paranoid and suspicious, scared and resentful (Adeosun & Owolabi, 2021).

Nonetheless, while these difficulties and inequities have resulted in significant macroeconomic losses in terms of growth, they have also occasioned income inequality and economic diversity (IMF 2018; IFE, 2021). Thus, as this inequality is a hot subject matter, its presence in the country's banking industry has prompted more investigation, therefore, on the bases of the aforementioned deductions, hence this study. The study was purposed to investigate the impact of gender discrimination on the employment decision in selected Nigerian banks, specifically in the Federal University of Technology, Akure (FUTA). This was to ensure the eradication or reduction of the phenomenon for the employees' motivation, satisfaction, enthusiasm, commitment and less stress. This was with the specific

objectives to: (i) assess the impact of socio-cultural norms on the employment decision in the selected banks in FUTA; and (ii) investigate how sexual harassment impact on the employment decision in the selected banks in FUTA.

Concept of Gender Discrimination

The history of the industrial revolution can be used to identify the roots of gender discrimination in the workplace where the work of women and children was socially defined as gathering in the earliest stages of human civilization, while men were expected to engage in farming and hunting (Miller & Razavi, 2014). However, the term "gender" was not first used by American and English feminists until the 1970s (Heather, Vanessa & Deborah, 2009). Gender emerged at an astonishing rate in the early 1980s in Nairobi Conference of 1985. Its adoption was aided by the staging of a series of key conferences such as the Cairo conference in 1994 and the Beijing conference in 1995 during which the phrase solidified its position (Deaux & Lewis, 2008). Gender therefore, involves the grouping of all identified distinctions between men and women: individual characteristics as well as differences in social roles or cultural representations (Elizabeth, 2009). This can further be described as the status of being male or female (Adeosun & Owolabi, 2021).

Although the terms "gender" and "sex" are distinct, they are frequently used interchangeably. For example, the term "gender" is used to express the social and psychological differences between men and women. However, sex is a term used to categorize species into either female or male; only female can give birth and suckle and male hormonal and genital anatomy differs from that of female. It also refers to what society perceives as masculine and feminine (Akin, 2008; Kura & Yero, 2013). Gender discrimination in the workplace can be described as the unjust advantage or disadvantage given to members of one group over members of another (Kelly, 2006). Thus, gender discrimination levels directly impact on employees' motivation, satisfaction, commitment and eventually work performance (Dilrukshi & Ranasinghe, 2021). The concept includes any sex-based distinction, exclusion, or restriction that undermines or negates a woman's ability to recognize, enjoy or exercise her human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other sphere on the basis of equality with men and women, regardless of her marital status (George & Chukwuedozie, 2015; Goldman, 2017; Isiaka & Aliyu, 2019).

Concept of Socio – Cultural Norms

The term "sociocultural" refers social and cultural factors which include shared customs, behaviours, patterns and beliefs among a population group. These factors are the most notable influences on how people behave in a society. However, for an organization to succeed, intercultural understanding is essential, given that any establishment that seeks to sell products or services must have a thorough understanding of, or at the very least, fundamental awareness of, its target market. This is particularly critical when entering into a new area (Sabit, et al., 2029).

Every facet of how corporations decide who to hire has an impact on society and culture. Although society and culture are not directly involved in business operations, they nonetheless indirectly play a significant role in determining how the business is run, from decision-making to the establishment of managerial and operational patterns and to the assessment of an establishment's success or failure. Because this may have an effect on the spread of their economic activities, organizations should be aware of the dominant attitudes, values and beliefs in each host community. Differences in attitudes and values among the management team, supervisors, and employees of a business can have a significant impact on the success or failure of the organization

(Ajami, Cool et al, 2006). The socio-cultural environment is crucial for the workplace since it has a substantial impact on the organization's performance, economic activity, and essential decision-making (Sabit, et al., 2029). However, the most important socio-cultural aspects that might have a significant impact on the organization are culture, language, religion, level of education, consumer preferences and societal perceptions of how the corporation should conduct its business (Trehan & Trehan, 2009).

Concept of Sex Harassment

Sexual harassment is a widespread issue that occurs in a variety of industries. Because there is no common definition of sexual harassment in the workplace, laws define it according to their jurisdiction. As sexual harassment in the workplace is measured using various devices, situations and individual perspective, and these interpretations have resulted in numerous conflicts (Adetutu, Paul & Iseoluwa, 2020). However, there are numerous definitions of the phrase "sexual harassment in the workplace," and this is determined by an individual's perspective, ranging from distinct legal instruments, cultural perspective, victims' school of thought, to academicians' perspective. Previous study believes that dominance of workplace' sexual behaviors is prompted by a need for

sexual fulfillment (Nauman & Abbasi, 2014). According to organized study, sexual harassment is an assault on the dignity of women in an atmosphere dominated by men (Nauman & Abbasi, 2014). However, based on the patriarchal nature of most environments, sexual harassment is also recognized as a type of male preference over female employment and a strategy to maintain men's superiority over women which has the effect of creating a gender pay gap and sex-split roles in the workplace (Fapohunda, 2014).

In addition to sexual lust, one reason for sexual harassment is to assert dominance over the victim, whether the perpetrator is a male or a female. If the victim is female, this can include reminding her that she is a sex object even at work or telling her that her only use is to satisfy one's sexual needs. In the case of male victim, it is a type of punishment for those who deviate from traditional masculine orders or to allow the victim to adhere to whatever is demanded of him (Szymanski, Moffitt & Carr, 2011). This implies that the motivation for workplace harassment influences the type of harassment and broadens the concept of 'sexual harassment' to cover all forms of professional harassment. Meanwhile, some studies isolate the sexual parts of workplace harassment from the non-sexual aspects that

can constitute harassment (Berdahl, Magley & Waldo, 1996).

Employment Decision

Employment is a partnership between two individuals, one of whom is an employer and the other is an employee, typically based on a contract (Kaifi, 2013). It is also described as a contract between an employer and employee that specifies the employee's commitment to performing specific services while on the job and at the employer's designated workplace in order to support the accomplishment of the organization's goals and mission in exchange for payment. A person who is hired to do services in exchange for payment and who does not do so as a standalone business is considered to be an employee. A person or organization that recruits workers or employees is known as an employer. Workers are compensated by their employers with pay or salaries in exchange for their labor or work (Seguino, 2007).

According to Kabeer et al. (2013), employers can range from people hiring a babysitter to organizations and governments that may recruit thousands of people. Jobs listings in newspapers (through classified advertising) and online, commonly known as jobs boards are the primary means by which employers locate employees and job seekers discover employers. Professional

recruitment consultants who receive a commission from the employer to find, screen and choose qualified candidates without discrimination are another common way for employers and job seekers to connect (Kabeer et al, 2013). The best way to evaluate different employees is through assessments that analyze their skills and measure their talents in the field. Due to Drucker's observation that "Everything a manager does, he does through making decisions" in his book "Practice of Management," he used the term "employment choice" to refer to decision making. It's true that managing requires making a lot of judgments. Because of this, many people believe that management involves making decisions. The word "decides" refers to making a decision about what one is expected to do at a future time. "It is a solution picked after analyzing multiple alternatives chosen because the decider anticipates that the course of action he chooses will do more than the others to

promote his aims and will be accompanied by the fewest probable disagreeable effects," (Isiaka & Aliyu, 2019).

A decision is a choice made after a person weighs the pros and cons of a situation or set of circumstances. It represents an expected path of behavior or action regarding what one should or should not do. Therefore, choosing one course of action from two or more alternatives might be referred to as decision-making. As a result, it requires us to make a decision and that decision decides whether we act or do nothing. Making decisions is an essential aspect of life. Everyday life involves making countless decisions for people. Every step of a business undertaking involves making a decision. Making decisions affects every aspect of management, including planning, organizing, staffing, directing, coordinating and controlling. Making decisions is therefore at the center of managerial tasks in an organization (Isiaka & Aliyu, 2019).

Gender Discrimination in the Human Resource Development Process

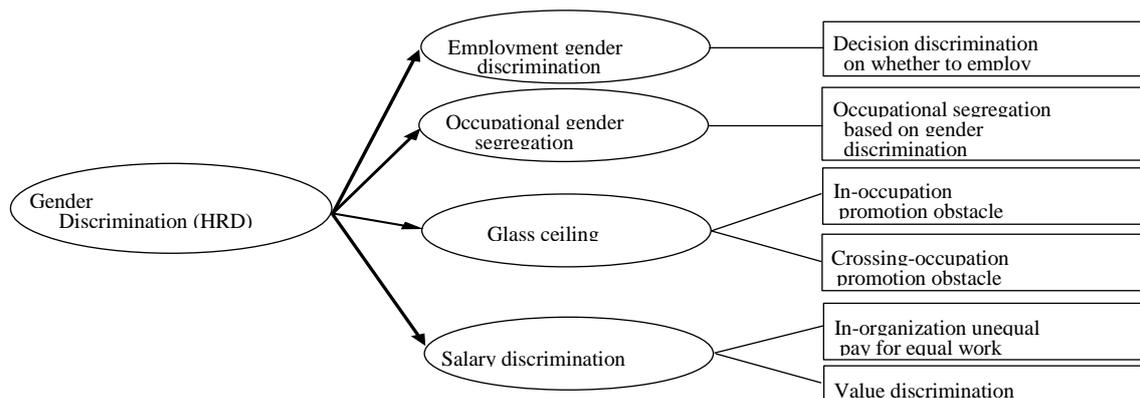


Figure 1. Yan, Yan and Zhang (2019).

Theoretical Framework

This study reviewed and adopted strategic choice theory out of a number of theories (feminist theory, socialist theory, equity theory, etc.) that are relevant to gender discrimination and employment decision at work. This is due to the strategic choice theory validation regarding its tenets and principles of incorporation of workforce diversity in every organization's level for optimal performance.

Strategic Choice Theory

Child John created strategic choice theory in 1972 by outlining the role that leaders or leadership groups play in influencing happenings in the organization through decision making in a dynamic political process. Top executives, according to strategic-choice theorists, make decisions that influence organizational outcomes and performance as they will make only decisions that are both useful to and fiscally sound in the place of work. According to (Roberson & Park, 2007), low to moderate levels of racial diversity among organizational leaders may hinder strategic decision making through diminished communication and increased conflict, thereby effecting business performance. Nevertheless, effective strategic choice therefore necessitates the exercise of power and the ability of organizational leaders to perform on their own free will, while

consequently, CEOs are assumed to have significant freedom in having influences in their workplaces (Finkelstein & Hambrick, 1996).

So, the contention that demographic diversity in this case in terms of age, gender, and educational upbringing, is linked with cognitive capacities that enlarge a team's informational resources and enhances its problem-solving ability was moved forward. Thus, in the context of top management teams, diversity broadens the range of cognitive perspectives required to recognize strategic opportunities and consider various strategic options (Wiersma & Bartel 1992). However, the theory advocates acceptance of a variety of workers in the workplace who are diverse in terms of age, gender, personality, educational attainment, ethnicity, ethnicity, religion, etc., and who are able to offer potential knowledge and skills to the development of the establishment. Therefore, for the best results, the principles and tenets of integrating workforce diversity at every level of a workplace could be supported by strategic choice theory.

Empirical Review

Akua and Cicilia (2015) carried out a study on gender discrimination in the workplace with a focus on women's participation in higher education management in Ghana. The

study utilized interview as the data gathering instrument. The findings of the study established significant impact of gender discrimination on the employment in the studied area as women were proven to be greatly underrepresented in the administration of Ghanaian higher education institutions as a number of factors precluding qualified women from rising to high-ranking positions in the institutions under study.

Also, Chia (2018) conducted a research on gender discrimination and employment decision on selected banks in Ilorin on 109 respondents. The study used multiple linear regression for testing its hypotheses and percentages, frequencies and cumulative frequencies were also employed to analyze the respondents' demographic data. Results indicated that gender discrimination influenced employment decision in the selected banks as analysis showed that female staff members were proven to be susceptible to sexual harassment.

Hypotheses Development

Osah, Ukoha and Alagah (2017) adopted purposive sampling technique for the selection of five (5) establishments on their study titled workplace discrimination and employees' performance in Nigerian food and beverage sector. This was with the sample size of 186 respondents as this was

determined by the Taro Yamane's formula. The study then employed spearman rank order correlation coefficient for the data analysis and the result confirmed a significant relationship between workplace discrimination and employees' performance. Thus, this hypothesis may be formulated as:

Ho₁: Socio-cultural norms do not have significant impact on employment decision in the selected banks in FUTA.

A set of questionnaire as an instrument of data collection and SPSS (24 version) for data analysis were used by Firooz and Bhavesh (2020) on their study identified as impact of gender discrimination on the employees of Ghalib Private University, Herat, Afghanistan. The findings established a significantly negative impact of gender discrimination on work satisfaction, employee's involvement and organizational identity of the studied institution. Hence, the hypothesis was expressed as:

Ho₂: Sexual harassment has no significant impact on the employment decision in the selected banks in FUTA.

Methodology

This study utilized survey research as its design given that a set of questionnaire was employed in the assembly of primary data. The questionnaire was directly distributed to the participants and feedbacks were acquired

instantly although the participants requested for extra time. Then, applicable descriptive techniques such as frequency and percentage were applied to describe the responses. The questionnaire covered two sections. The section One depicted demographic information and educational background of respondents while the section Two was also separated into two unlike segments, that is, (i). assessment of the impact of socio-cultural norms on the employment decision in the selected banks in FUTA (ii). investigation on how sexual harassment impact on the employment decision in the selected banks in the study area.

The questionnaire was improved from the reviewed literature and authenticated by an expert known for enormous experience in the field of study and questionnaire design. The questionnaire was designed in such a

way that it could without difficulty be figure out by the respondents as this was schemed in a close ended manner, utilizing four Likert-scale type of strongly agree, agree, disagree and strongly disagree. Thus, least square regression model was used as the inferential statistic, while SPSS (version 25) was adopted to run the analysis of the gathered data.

Population of the Study

The population for the study encompassed the total staff of all the selected banks in the FUTA which were First Bank Plc, Guaranty Trust Bank Plc, United Bank of Africa Plc and Wema Bank Plc, tallying One Hundred and Six (106). The information on this figure resulted from the engaged field work as the participants involved credit / retail managers, branch managers, operation managers, clerks and cashiers.

Table 1. Population of the Study in the FUTA' Selected Banks

Name of the Banks	Population
First Bank Plc	29
Guaranty Trust Bank Plc	28
United Bank of Africa	26
Wema Bank Plc	23
Total	106

Source: Researchers' Formulation, 2022

Sample Size and Sampling Technique

The study employed simple random sampling technique. This was due to the technique's ease of usage. Based on this, the sample size was Eighty - Six (84) as this

was determined by Taro Yamane's formula ($n = N/1+Ne^2$) applied for this purpose. Where, n = preferred sample size N = size of the population

e = concentrated standard margin of error (5% or 0.05) 1(one) = a theoretical constant Thus, the sample size was calculated employing the above formula with n = 84 Hence, the sample size of the study was 84.

Results and Discussion

Part A: Descriptive Analysis of Research Questionnaires

An aggregate of Eighty - Four (84) copies of the questionnaire were handed over to the participants of the study at FUTA as the selected banks were First Bank Ltd., GTBank, UBA, and Wema Bank, but it was

Eighty – One (81) copies representing 96 percent that were acceptably filled and beneficial for the analysis. However, the descriptive and inferential statistics were used in this research. According to Smith (2020), the descriptive statistics are used to characterize the fundamental components of the data in the study. These provided concise summaries of the sample and measurements of the study. The descriptive statistics used in this study included the total, mean and standard deviation which constituted the foundation of the research questions in the quantitative data.

Table 2. Socio-Cultural Norms and Employment Decision

	N	Sum	Mean	Std. Deviation
Women at the workplace receive much opportunity than their male counterpart	81	362.00	4.4691	.86727
Employment decisions are made based on gender inclusive culture.	81	384.00	1.5432	1.1116
Cultural values and belief of employers affect the way decisions are made in the workplace.	81	371.00	4.5802	.68673
Religion and cultural belief affect employment decision.	81	373.00	4.6049	.73619
Employment decisions are made to tolerate societal norms.	81	381.00	4.7037	.60093

Source: Authors' Computation, 2022

The result of the descriptive statistics in the Table 2 above showed that on a 5-point Likert scale response, majority of the respondents (4.4691) agreed to the notion that women in the banking institutions are better opportune to be employed with a precise standard deviation value of (0).8. Also, the question on whether or not

employment decisions were made based on gender inclusive culture was strongly disagreed at mean (1.54) and was largely argued amongst the respondents. The result also showed that the respondents also believed that employment decisions in their banks were based on cultural values and ethics (4.5), while a larger fraction also

agreed strongly that religion and cultural beliefs in one way or the other influenced the decisions of management on employment in the financial institutions, while majority of the respondents with mean value of (4.7) strongly agreed that the

employment decisions in the banking firms were made to tolerate societal norms, while few respondent disagreed to this view as the standard deviation was 0.6, indicating a high precision outcome.

Table 3. Gender Discrimination and Employment Decision

	N	Sum	Mean	Std. Deviation
Employment decisions promote sexual harassment and possible workplace violence.	81	378.00	4.6667	.57009
Women are prone to sexual harassment in the workplace.	81	362.00	4.4691	.86727
Sexual harassment affects employee’s self-esteem and performance in the workplace.	81	384.00	4.7407	.44096
Employment decisions mitigate sexual harassment on employees in the workplace.	81	371.00	4.5802	.68673
Female employees are seldom considered for promotion compared to male employees.	81	373.00	4.6049	.73619

Source: Authors’ Computation, 2022

The result in the descriptive statistics indicated in the Table 3 above showed that majority of the respondents had a strong notion that the centralized employment decision prevalent in their banks promoted sexual harassment and workplace violence as presented by the mean value of (4.6667) which was less argued with the standard deviation of (0.057). Also, the assertion that women were more liable to sexual harassment in the workplace was strongly supported with mean value of (4.4691), while a larger proportion with a mean value of (4.7407) in the respondents also agreed that sexual harassment certainly affected

employee’s self-esteem and performance in the workplaces.

In the same vein, the question on whether or not employment decisions mitigated sexual harassment on employees in the banks was strongly supported as it depicted a 4.5 mean value which indicated a general support by majority. Finally, the outcome of the fifth statement showed that there were a few promotional opportunities for female in the banking institutions which was strongly supported by majority of the respondents with a mean value of 4.6 and a very low standard deviation value of 0.7 indicating that many staff members shared this same view.

Part B: Analysis of Research Hypotheses

H₀₁: Socio-cultural norms do not have significant impact on employment decision in the selected banks in FUTA

Table 4. Least Square Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699 ^a	.489	.476	.65763

a. Predictors: (Constant), Gender Inequality, Occupational Stereotype

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.267	2	16.134	37.305	.000 ^b
	Residual	33.733	78	.432		
	Total	66.000	80			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.839	.687		1.222	.225
	Gender Inequality	.054	.117	.037	.462	.045
	Occupational Stereotype	.771	.089	.699	8.635	.000

a. Dependent Variable: Employment Decisions
 Source: Authors' Computation, 2022

The results in the Table 4 above showed that the R-value was (0.699), R² value was (0.489) and the value of Adjusted R Square was (0.476). This implied that the regression model was statistically significant. The R coefficient (.699) presented a moderate level of significance between the decisions made on employment and the socio-cultural norms in selected banks. Specifically, the R² value exhibited that gender inequality and occupational stereotype contributed 48% of the decisions made in recruiting, promoting and transferring employees in the selected banks in FUTA. Meanwhile, the remaining 42% was explained by other variables or factors not highlighted in the model. Furthermore, it was presented in the model

that the P value was less than the significant level (0.05) indicating that the result was a good model.

The implication of the results indicated that the variation in the dependent variable (Employment Decisions) was explained by the coefficient of the independent variables (Occupational Stereotype and Gender Inequality) in the regression model $Y = f(\beta + 0.05x_1 + 0.77x_2)$. This implied that in the four selected banks, employment decision was influenced by 77% consideration for occupational stereotype, while, gender inequality was rarely low with 0.05% consideration. The null hypothesis was hereby rejected while the alternative

hypothesis that there was a significant employment decision in the selected banks impact of socio-cultural norms on the in FUTA was accepted.

H₀₂: Sexual harassment has no significant impact on the employment decision in the selected banks in FUTA

Table 5. Least Square Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.433 ^a	.188	.167	.82901

a. Predictors: (Constant), Rape, Sexual Intimidation

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.394	2	6.197	9.017	.000 ^b
	Residual	53.606	78	.687		
	Total	66.000	80			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.798	.726		2.476	.015
	Sexual Intimidation	.115	.146	.087	.789	.432
	Rape	.484	.136	.392	3.547	.001

a. Dependent Variable: Employment Decisions
Source: Authors' Computation, 2022

The outcome of the regression model in the Table 5 disclosed that the R-value was (0.433), R² value was (0.188) and the value of Adjusted R Square was (0.167). This implied that the regression model was statistically significant. The value of R (.433) showed that sexual harassment had a low significant effect regarding employment decisions in the Nigeria banking sector. Specifically, the R² value showed that the variations in employment decisions was influenced by 18% harassment issues such as sexual intimidations in the banks in

FUTA while the remaining 72% was explained by other variables not presented in the model. This suggested that there was rarely consideration for sexual abuse in the Nigerian banking industry as there was perceived to be high discipline against sexual immoralities. This was supported with the report of Paseda (2012) with strong emphasis on the notion that the Nigerian banking system was highly regulated by both the government forces (CBN) as well as the customer preferences.

Furthermore, it was presented in the model that the P value was less than the significant level (0.05) indicating that the result was a good model. The result showed that the variations in employment decisions made in the selected banks was dependent on certain issues of sexual harassment such as sexual intimidation as presented in the regression model $Y = f(\beta + 0.11x_1 + 0.48x_2)$. Although result showed a very low level of significance (18%), it was evident that the issue of sexual intimidation contributed to 11%, while others contributed 48% influence on employment decisions in banks. It was on this basis that the null hypothesis was rejected while the alternative hypothesis that sexual harassment had a significant impact on the employment decision in the selected banks in FUTA was accepted. This outcome corroborated the findings of Chai (2018)'s study that gender discrimination influenced employment decision in the selected banks in Ilorin metropolis.

Discussion of Findings

The result in the Table 4 showed that there is a high tendency that certain positions in selected banking institutions were preconceived to be male stereotypical. It was noted that the male stereotypical occupations in Nigerian banking firms included chief managerial cadre, drivers, and security personnel while professions

such as receptionists and front desk officers were stereotypical to the female. The outcome of the study aligned with the study of Eleje and Wale (2017) who affirmed that the Nigerian banking firms could be viewed as female dominated institutions, even though the preponderance of the female numerical strength was mostly in the lower cadre.

Nevertheless, the result also showed that there was literarily no gender inequality in considering employment decisions in selected banking institutions in FUTA. Thus, it could be established that the assumption of equal variance in the selected banks was not violated. However, the Nigerian perspective of certain gender role performance was obtainable in the four selected banks, particularly regarding employment decisions like recruitment, promotion and transfers. Therefore, the study established that there was a significant impact of socio-cultural norms on the employment decision in the selected banks in FUTA which could invariably influence the level of their performance in the banking industry generally.

Furthermore, the result in the Table 5 showed that the variations in employment decisions in the selected banks was influenced by (18%) harassment issues, inferring that there was rarely any recorded

issues of sexual intimidations and harassment in the banks located at FUTA. Hence, it was established that there was rarely consideration for sexual abuse in the Nigerian banking industry as there was perception of high discipline against sexual immoralities. This was supported with the report of Paseda (2012) with strong emphasis on the notion that the Nigerian banking system was highly regulated by both the government agencies like Central Bank of Nigeria as well as the customer preferences. The findings of the study revealed that employees were subjected to sexual harassment in order to keep their jobs in their respective banks. Although, it was evident that the significance on employment decision was low in the four selected banks, the impact still had major ramifications for staff personal lives as well as their banking professions.

Conclusion and Recommendations

Conclusion

Based on the findings of this study, it was shown that gender discrimination was related to the variables of employment decision such as employment, economy, education, religion and health. Thus, such discrimination hurts employees' performance effectiveness, particularly for employee victims given that they feel pain from its demoralizing effects. It equally harms the mental health of victims; results

in low rate of job satisfaction; causes stress; increases job turnover; and stimulates inefficient hiring and promotion practices. Hence, it could be concluded that there was significant impact of gender discrimination on the employment decisions in the Nigerian selected banks in FUTA.

Recommendations

Resulting from the findings of this study, it was therefore recommended that the management of the banks under study should endeavor to ensure:

- i. Gender balance in leadership and workforce through strategies such as: (a) leadership championing, as the board, CEO and senior management members of the workplace can commendably set the tone, and champion gender equality issues through the creation of a culture that incorporates gender equality and encompassing measurable targets. To fulfill this mandate, gender equality plans should consecrate a budget and staff, highlight a strategy and scheme that assess progress by the means of employing a data-driven method. (b) goal setting, this is bothered on setting of time-bound, attainment of targets so as to heighten women's representation at every level of the workplace. This is for example - in the executive, boardroom, workforce and senior management, while

also promoting accountability through the publication of results.

- ii. Equal pay and work-life balance, which could be through: (a) the offer of equal compensation to all employees for the same work done, as this should be done regardless of the gender. The organization should adopt a strategy and implement a policy capable of narrowing the gender pay gap, and as well intensify openness at work through publication of information on the living wage vows and sex-disaggregated reward. (b) Family-friendly workplace practices, as the organization could establish and execute more comprehensive parental leave policies for both parents who meet or surpass international requirements for leave time and pay rate.
- iii. Encouragement of women's career advancement from recruitment to retention through: (a) aggressive talent management policies. This can include tactics to fill the talent pipeline, assignments for professional growth, chances for formal education, mentoring, promotions, and leadership training. The organization should work to develop a diversity and inclusion council that supports and oversees gender equality performance, as well as make diversity and inclusion targets public by stating the progress made in annual reports. (b) offer of safe workplaces for men and women:

Strong workplace regulations to prevent sexual harassment should often be implemented, along with frequent training and communications campaigns, then posting information about safe workplace's policies, including those on sexual harassment. These should be accomplished by providing equal support to employees who have been victims of domestic abuse.

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Youth Empowerment Schemes and Unemployment in the Federal Capital Territory (FCT), Abuja, Nigeria

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Abstract

For Nigeria, the so called giant of Africa to stand out economically as one of the best countries in the continent and also in the world, it must effectively empower its teeming youths. This is not only to better the lots of its young citizens, but also to enable them to contribute maximally to the national economic growth, while equally minimizing the high rate of criminality in the country. Hence, this study assessed the impact of youth empowerment schemes on the unemployment situation in Nigeria, with a focus on Abuja, the Federal Capital Territory (FCT). The study utilized simple random sampling technique through a questionnaire administration. The descriptive statistics used involved simple percentages and tables, while inferential statistics adopted was regression analysis. The findings of the study established: a significant and positive impact of youth empowerment schemes on the youths' employment generation; and a significant impact of N - Power scheme on the youths' self-reliance in Abuja Metropolis. The study hence, recommended the improvement of the country's unemployment condition by the government through a thorough review of all policy schemes targeted at youth empowerment and development activities. This was with a view to minimize replication and clashes in the operational sectors.

Keywords: Job Creation; Job Security; National Development; Youth Empowerment; and Youth Unemployment.

Introduction

Unemployment has recently taken a heavy toll on Nigerian youths. This is due to a situation in which a group of young people from various backgrounds in the country are willing and able to work, but could not find any, with some being seriously starved, while others are losing their lives (Okoye-Nebo, Kenneth & Ugochukwu, 2014). Youth unemployment has recently become one of the first thoughts that come to mind

whenever the country's budget is to be presented. Youth unemployment, with visible signs of joblessness in every nook and cranny of the society, has emerged as one of the Nigeria's most pressing developmental concerns (Lawretta, 2021). Since gaining political independence in 1960, Nigerian economy has undergone major operational changes that have led to structural transformations which have not produced any appreciable sustained

economic growth or development to guarantee enough employment opportunities for her youths (Emeh, 2012).

Nigeria, the most populous nation in Africa and the largest black nation in the world, is endowed with a wealth of natural and human resources. However, a number of man-made impediments have prevented this magnificent nation's potentials from materializing into observable realities. The implications of our country's failure to realize its manifest destiny are consequently numerous and can be seen in the countless instances of deteriorating infrastructure, subpar service delivery, as well as the high rate of poverty and unemployment wreaking havoc on Nigerian society today (Oduwole, 2015). Furthermore, there is ample evidence of the devastation caused by unemployment in the country as hundreds of young Nigerians graduates from various schools are getting into the nearly hopeless and extremely competitive labour market every year. A cursory examination of the Nigerian situation reveals that Nigerian streets are littered with youths engaged in informal economic activities such as street commercial motorcycle riders, hawking and the like. While others resort to one form of criminality or another, with internet fraud, popularly known as yahoo yahoo, being the most common in recent times. These are teenagers who in normal circumstances,

would have obtained profitable employments in some organizations or displayed their skills and ingenuity if there were enabling settings and dependable management structures in place (Obi, Emenike & Chukwurah, 2021).

According to statistics from the National Population Commission (2014), more than half of Nigeria's 180 million people are under 30 years of age. In addition, the National Bureau of Statistics (2017) reported that over seven million jobs have been lost in Nigeria since 2015, including over four million between 2016 and 2017. Therefore, in line with Doreo (2013), youth unemployment in Nigeria is three times higher than general unemployment and is increasing at a pace of 16 percent per year as unemployment occurs when persons are jobless and have looked for work within the previous five weeks. The number of jobless people is divided by the total number of people who are now employed to get at the unemployment rate, which is a measure of how prevalent unemployment is in the country. In Nigeria, unemployment is defined as the percentage of the labour force that was available for employment, but did not work for at least 39 hours in the week before the survey period (Oduwole, 2015).

However, it is difficult to find a family in Nigeria where no one is unemployed,

underemployed, or at risk from unemployment and its social impacts. As the proverb goes, "An idle mind is the devil's workshop", it can be argued that unemployment contributes to social issues like armed robbery, homelessness, prostitution, and other social vices. Since experience has shown that government alone cannot shoulder the responsibility of providing employment for all of its citizens, governments across the globe are in fact, investing a significant amount of resources to reduce unemployment by fostering the growth of private and informal sectors (Obi et al., 2021).

The tremendous rise in the social instability in Nigeria has been greatly exacerbated by the rising percentage of youth unemployment since the majority of the unemployed individuals in the country are graduates of Universities and Polytechnics. So, unemployment is a major cause of serious developmental issues throughout the country as urban youth aged twenty to twenty-four currently have a 40% unemployment rate. Additionally, the rate is 31% for people between the ages of 15 and 19 and this, accounts for two-thirds of urban unemployed people between the ages of 15 and 24, thus, making Nigeria to have historically been marked by high rates of youth unemployment (Alanana, 2003).

Furthermore, Alanana (2003) opined that unemployment is potentially dangerous as it sends disturbing signal to all segments of the Nigerian Society. From the foregoing analysis, it is obvious that while we lament about Nigeria's unemployment crisis, it is imperative to hold that it does not exist in a vacuum. Youth unemployment is due to corruption. Corruption is a global problem and no country of the world is totally free of its menacing grip. The differentiation in the scale of corruption perception index from one country to another, according to Ochulor, Chinenye and Leo (2011) is on the level of its commonness and the honesty committed willingness by the people in putting a halt to it. Unfortunately, in Nigeria, every level of the society has been deeply permeated by a pervasive and debilitating culture of corruption. In this mess, Nigerian youths cannot find jobs because none has been created.

Recent data revealed that compared to the 1970s oil boom, when excessive profits led to wasteful spending in the public sector that disrupted employment dynamics and also altered the revenue bases for policy planning, the Nigerian economy developed substantially in the latter 1970s. The subsequent economic changes and the structural adjustment programme (SAP) were brought about as a result of this and other numerous crises. The primary goal of

the economic structural reform was to completely restructure the Nigerian economy in response to the country's population growth (Lawretta, 2021).

However, the implemented economic and financial structural reforms did not provide meaningful outcomes, leading to an alarming rise in the rate of youth unemployment and the associated social and economic issues in recent years. Every developing economy, including Nigeria, deals with unemployment as a developmental issue (Lawretta, 2021). The younger generation has been more affected by it. Nigerian youngsters, especially graduates, swarm to Abuja, the Federal Capital Territory (FCT) of the nation, in quest of white-collar work. This is due to the notion that the city offers more (work) prospects than other cities in the nation, thus, making a move to the city in search of greener pasture, necessary. This rush has contributed to the FCT's profligate unemployment rate. This is not to imply that there is no unemployment or it is lower in other states of the federation. Based on this, this research seeks to examine the impact of government's introduced empowerment schemes on the youths' unemployment situation in Nigeria, while the specific objectives are:

- i. to investigate the impact of the government's introduced

empowerment schemes on the youths' employment generation in Abuja Metropolis, and

- ii. to assess the impact of N - Power scheme on the youths' self-reliance in Abuja Metropolis.

Hypotheses of the Study

Ho₁: Government's introduced empowerment schemes do not have significant impact on the youths' employment generation in Abuja Metropolis; and

Ho₂: N - Power scheme does not have significant impact on the youths' self-reliance in Abuja Metropolis.

Literature Review

Concept of Unemployment

Akinsola, (2021) described youth unemployment as young individuals aged 18 to 35 who aspire to work, but are unable to get suitable jobs. The concept, according to Fajana (2000), is a condition in which persons who are eager and capable of working are unable to obtain adequate paid job. It is one of the macroeconomic issues that every responsible government must monitor and manage. The higher an economy's unemployment rate, the greater the poverty level and attendant welfare concerns. Therefore, Fajana (2000), Alao (2005) and Wikipedia (2014) acknowledged the existence of following kinds of

unemployment: structural unemployment; frictional unemployment; seasonal unemployment; cyclical or Keynesian unemployment; and technological unemployment.

Structural unemployment occurs when the structure of an industry or the country's economic activities changes. This could be due to the employment of outmoded technology, a lack of capital resources in relation to demand, or the product or service no longer being in demand. Frictional unemployment is caused by industrial friction, in which jobs exist but employees are unable to fill them because they lack the appropriate expertise or are unaware of the existence of such positions. The way the business cycle functions is the cause of cyclical or Keynesian unemployment. This is a situation where there is no enough labor available to meet demands (Okoye-Nebo, et al., 2014).

In other words, when aggregate demand falls below the level of full employment, it is insufficient to buy the output at the level of full employment as seasonal variations in the activities of specific industries are brought on by climatic changes, changes in fashion, or by the very nature of those industries themselves. Technological unemployment results from changes in industrial methods, thus, a circumstance

where machines take the role of people as constant technological advancements have improved the mechanization of the production process. Personal factors like advanced age, physical or mental illness, poor work habits and insufficient training contribute to residual unemployment (Okoye-Nebo, et al., 2014).

Concept of Youth Empowerment

The terms youth, adolescent, teenager, youngster, and young person are frequently used interchangeably over the world and denote the same thing. Youth is typically used to describe a stage of life that falls between childhood and maturity. According to Konopka (1973), different countries have different definitions of what age a person qualifies as a youth and is therefore entitled to special care. As a result, the World Bank and the United Nations General Assembly define a youth as someone who is between the ages of 15 and 24. The World Health Organization, however, has a different range for what constitutes a youth. According to the organization, a youth is any member of society between the ages of 15 and 34. Note that Nigeria is a member of the aforementioned organizations and that her youths fall within their target age ranges.

The concept of youth empowerment, as employed in this study, is greatly influenced by the meaning of enablement. Accordingly,

Akinsola (2021) described empowerment as a multifaceted social process that aids individuals in taking charge of their life. It is a process that develops people's power (or ability to act) for use in their own lives, communities and societies through taking action on issues that they define as essential. According to this definition, empowerment is a process that results in a positive outcome when all of the steps have been taken. This is the ability to successfully participate and share authority. It gives the ability for self-expression based on personal experiences, the capacity to analyze these experiences critically, and the capacity to derive useful conclusions that causes many parties' behavior to change. It challenges long-held beliefs and exposes conflicts of interest resulting from a desire to distribute authority. Since we only look at information that is already available, it follows that access to information is one of the elements of empowerment.

It is typically participative or all-inclusive in nature, with everyone listening to and appreciating one another's opinions. It frequently requires local organizing, which results in capacity growth. Everyone must be trustworthy and dependable because of the participation character of the process. The claim is that if the youth of Nigeria are given more authority, they will become more cautious in order to be viewed as

capable of attaining empowerment, which in this article is meant to mean the creation of an atmosphere that will allow the youth of Nigeria to fully realize their potential. Thus, youth empowerment is a continuous enhancement of youth development, structures, institutions, and programmes in order to create a social condition, ensure youth rights, advancement, and safeguarding their welfare for effective functioning and self-actualization (Bulus, Gubak & Gubam, 2020).

Therefore, youth empowerment is frequently discussed as a bridge to intergenerational equity, civic participation and democratic development. In light of this, the concept of youth empowerment is referred as the process of continuous improvement through which all young people work to meet their fundamental social and emotional needs. These include the need for safety, a sense of belonging, a sense of purpose, and a spiritual foundation, as well as the need to develop the knowledge and abilities necessary to function and contribute in daily life (Bulus, Gubak & Gubam, 2020).

Some of the Government's Introduced Empowerment Programmes for Youths in Nigeria

Over the years, the government has institutionalized programs and launched social campaigns to improve the lots of

Nigerians, particularly the youth, in an effort to prevent the collapse of the Nigerian state. The National Directorate of Employment (NDE), the Green Revolution (GR), the National Youth Service Corps (NYSC), the Farm Settlement Scheme (FSS), the Micro Credit Youth Empowerment Program, the National Economic Empowerment and Development Strategy (NEEDS), the Family Economic Advancement Program (FEAP), the Subsidy Reinvestment and Empowerment Program (SURE), the N-Power, among other programs, are notable among the programmes. However, the N-Power program was the subject of this study since it reached all groups of young people in the nation, which made it a compelling choice (Zuwaira, Abdulrahman & Muhammad, 2020).

Overview of N-Power Scheme

In June 2016, the International Development Association received a credit from the World Bank group in the amount of \$5 billion to help establish programs for Nigeria's economic development. As such, the National Social Investment Program, the Federal Government of Nigeria's social safety net programs were established with an additional \$1.3 billion from its budget. From that time, these programmes - financial aid, job training, and social intervention initiatives have directly impacted more than 4 million people. The N-Power programme

was created in this line to reduce the widespread unemployment among young people and promote social security (Dauda, Adeyeye, Yakubu, Oni & Umar, 2019). This was due to the fact that a society's ability to develop economically and biologically depends on its youths (Okonkwo, Onyeze & Ochiaka, 2019).

N-power scheme began on the 9th of June 2016. This was with the first part to target acute hardship of the Nigerian youths in the sectors of agriculture, education, and many others. Thus, it was introduced by the current government of President Mohammed Buhari with a view to improve the socio-economic conditions of some jobless Nigerian youths as it was meant to equally serve as one of the pillars in enhancing sustainable development in the country (Zuwaira, Abdulrahman & Muhammad, 2020).

N-Power is an initiative for job development and empowerment of the Federal Government of Nigeria's National Social Investment Program (NSIP) (FGN). In essence, it is a program to improve employability that aims to instill the learn-work-enterprise culture in young people between the ages of 18 and 35. In fact, the FGN's vigorous investment in youth development aims to address some of the long-standing shortcomings in public

services, including the low teacher-to-student ratio in public elementary schools, the high prevalence of preventable diseases, and the dearth of tax-paying individuals. Additionally, the Nigerian government hopes to use N-Power to mobilize a sizable volunteer workforce to address some issues with public services and boost the overall economy livelihood (Nwaobi, 2019).

The programme also emphasizes teaching our non-graduates pertinent technical and business skills to improve their prospects for employment (livelihood). The main objectives of N-Power are to intervene and directly improve a critical mass of young unemployed Nigerians' quality of life; to develop a qualitative system for the transfer of employability, entrepreneurial, and technical skills; to create an ecosystem of solutions for failing public services and government diversification policies; and to develop and enhance Nigeria's knowledge economy (Nwaobi, 2019).

As a result, the various N-Power categories are as follows:

Section one known as Graduate Category: (A) N-Power Volunteer Corps: This comprised (i) N-Power Teach; (ii) N-Power Teach (Stem); (iii) N-Power Health; (iv) N-Power Agric.; and (v) N-Power Voids.; while section two identified as Non-Graduate Category: This encompassed (i) N-Power

Knowledge; (ii) N-Power Build; (iii) N-Power Junior; and (iv) N-Power Innovation (Nwaobi, 2019).

In terms of structure, the N-Power volunteer corps is a post-tertiary participation program for Nigerians between the ages of 18 and 35 that includes a two-year paid volunteering program. Operationally, graduates carry out their major responsibilities in designated public services located in their close-by areas. Additionally, they are entitled to computing services that provide the data they need for their specific engagement as well as data for ongoing training. N-Power Teach Volunteers specifically assist in enhancing the delivery of basic education in Nigeria by serving as teaching assistants in primary schools (Nwaobi, 2019).

Again, as a part of the N-Power Teach initiative, N-Power Teach (STEM) recruits recent graduates with aptitude for and interest in computer programming (and other related fields) to help with the implementation of the STEM curriculum for primary and secondary schools developed by the Federal Government. Similar to this, N-Power Health volunteers work to enhance and promote preventive healthcare in local communities for families, individuals, and vulnerable parts of society (including pregnant women and children). Volunteers with N-Power Agro supposedly offer advice

to farmers throughout the nation by sharing necessary information and compiling information on Nigeria's agricultural resources. Similar to this, the voluntary Asset and Income Declaration Scheme (VAIDS) aims to persuade partially and fully compliant as well as noncompliant taxpayers to voluntarily declare their true income and assets and pay the necessary taxes to the government. Essentially, this program is intended to last for a year. After that, competent participants might have received job offers from the appropriate tax authorities, and the remaining participants were transferred to N-Power Teach to complete their programme (Nwaobi, 2019).

However, under the second category, N-Power knowledge, young Nigerians are trained to establish a knowledge economy equipped with world-class skills and certification in order to become relevant in domestic and global markets. Similarly, N-Power Build is a vocational training component of the NSIP plan dedicated to the training and certification of unemployed Nigerian youths with the goal of constructing a highly competent and qualified workforce of technicians, artisans, and service professionals in Nigeria. The trade disciplines of N-Power construction are as follows: automobile, carpentry and joinery, electrical, installations, masonry, painting and decorating, plumbing and

pipefitting, welding and fabrication. This program is intended to last twelve months, divided into three months in training facilities and nine months of apprenticeship with employers from the relevant industry. The beneficiaries (trainees) also receive a monthly stipend of N10,000 in addition to the necessary training materials (consumables and tools). Moreover, tool kits are provided as a complimentary exit package to trainees who meet the requirements for the apprenticeship part of the programme (Nwaobi, 2019).

Theoretical Framework

According to Raw (2005), a theory is a collection of connected concepts, definitions, and ratios that offer a systematic understanding of phenomena by defining relationships between variables, describing, expounding on, and making predictions about the characteristics of the phenomena. Thus, the motivation theory of Abraham Maslow was examined and used for this study.

Abraham Maslow's Hierarchical Need

Theory of Motivation

The hierarchical need theory of motivation was put forth by psychologist Abraham Maslow in 1943 and 1954. According to the theory, satisfying needs can motivate people and that some needs are more important than others. Maslow developed the hierarchy of

needs, which is still relevant to all aspects of human endeavour, based on this concept. He did this by identifying five stages of needs, including physiological need, need for safety and security, need for love and belonging, need for self-esteem, and need for self-actualization. (i) Physiological Needs: these include the need for sleep, sex, food, clothing, shelter, and other fundamental physical requirements. (ii) Safety and Security Needs: these needs come into play when the physiological demands are mostly met. (iii) Belongingness, Social and Love Needs: after basic physiological and safety needs have been met, a third layer begins to emerge (Ibeh, 2015).

However, a person needs friends, a romantic partner, kids, affectionate relationships in general, and even a sense of community. (iv) Self Esteem Needs: Maslow identified two types of self-esteem needs: a lower version and a higher version. The bottom one is the need for other people's esteem, as well as the needs for power, fame, glory, attention, reputation and respect. The demand for self-respect, which includes emotions like assurance, skill, accomplishment, mastery, independence and freedom, is part of the higher form. (V) Self - Actualization Needs: Maslow referred to this level as having self-actualization needs in several different ways. His term for it is growth motivation (as opposed to deficit motivation), needs

(sometimes known as B needs, as opposed to D needs) and self-actualization. These are requirements that are unrelated to equilibrium or homeostasis as once activated, they remain felt. In fact, as we "feed" them, they probably get stronger. They entail a persistent drive to achieve potential and "be all that you can be." It is everything that comes down to becoming the most whole and complete (Ibeh, 2015).

Thus, this suggests that once a need is met, it ceases to serve as motivation. These needs were referred to as survival needs by Maslow. The benefits of vocational training inspire an individual to participate in a programme according to this theory, which is relevant to the current study. As youths take part, they learn things that help them to survive, live happy lives, provide for their own needs, connect with others and most importantly, contribute to the advancement of the society. Maslow emphasized that these demands are in order or hierarchy, despite being full in nature. He established the hierarchy of needs, which is now applicable to all human endeavours (Ibeh, 2015).

Empirical Review

Emeh (2012) conducted a study titled "tackling youth unemployment in Nigeria: the Lagos State development and empowerment programmes initiatives",

with both primary and secondary sources used for data generation. The finding confirmed significant impact of empowerment programmes on the employment situation in the Lagos State.

Likewise, Dauda et al. (2019) examined the impact of N-power programme on youth enterprise in Minna metropolis on 225 respondents with the use of a cross sectional survey design for the generation of data. The study adopted Pearson's product moment correlation for testing its hypotheses. Thus, the result established non – existence or insignificant link between the N-power scheme and any of the following variables, employment generation, poverty lessening and skill acquirement.

Methodology

This study employed survey research design that endorsed the adoption of questionnaires for eliciting data from the respondents at the Nigerian Federal Capital Territory, Abuja. Descriptive research was used with so as to statistically deduce the obtained information on the population. The population for this study was Three Thousand, Two Hundred and Fifty – Eight (3,258) youths who benefited from the Federal government of Nigeria's introduce N – Power scheme. The figure was centered on the provided

information during the field work. Then, Taro Yamane's formula was employed to determine the sample size which was Three Hundred and Fifty – Six (356), where

$$n = \frac{N}{1 + N(e)^2}$$

and n = Sample size, N = Population of the study

e = Tolerable error (5%)

The study applied primary source of data collection as this was through the use of questionnaire to collect the required information from the participants. Therefore, simple percentage, tables and regressions analysis were adopted for analyzing the collected data. The simple percentage and tables were used to describe the respondents' demographic characteristics, while regression analysis was utilized to test the study's hypotheses through the application of SPSS (22 version).

Results and Discussion

Tables 1 through 3 present the results of the study's analysis as Three Hundred and Five (305) out of Three Hundred and Fifty - Six (356) copies of the questionnaire administered on the participants were correctly completed and given back being 86 % response rate. So, the analysis was built on 305 copies of the questionnaire.

Table 1: Socio-Demographic Characteristics of the Participants

Participant Characteristics	n	%
Gender		
Male	174	57.0
Female	131	43.0
Total	305	100.0
Age Range		
Below 20 years	50	16.4
21-30 years	165	54.1
31-40 years	84	27.5
41 years & above	6	2.0
Total	305	100.0
Marital Status		
Single	172	56.5
Married	95	31.0
Divorced	30	9.9
Widow/Widower	8	2.6
Total	305	100.0
Educational Qualification		
WAEC/SSCE	40	13.0
OND/NCE	72	23.7
B.Sc./HND	161	52.9
M.Sc./MBA	32	10.4
Total	305	100.0
Occupation		
Health	76	25.0
Agriculture	47	15.4
Technologist	59	19.5
Teaching	122	40.1
Total	305	100.0
Years of N- Power Employment		
6 Months	24	7.8
1 Year	63	20.6
2 Years	85	27.9
More than 2 Years	134	43.8
Total	305	100.0

Source: Field Survey, 2022

Results in Table 1 showed that 57.0% of the participants were male, while 43.0% were female, thus, it indicated that majority of those who benefited from the government’s introduced empowerment scheme (N – Power) in the Federal Capital Territory

(FCT), Abuja were males. It was also shown that 16.4% of the study participants were below the age 20 years, 54.1% were of age 21-30 years, 27.5% were of age 31-40 years, while 2.0% were of ages 41 years and above. This implied that most of those who

benefitted from the N – Power scheme were those whom the scheme was actually targeted. That is, those who could make judicious use of the given opportunity. Marital distribution illustrated that 56.5% were single, 31.0% were married, 9.9% divorced, while 2.6% were widow/widowers. This suggested that youths who were single benefitted most from the scheme as these young ones were expected to be committed more on the programme since there were less or no family disturbances.

In relation to the educational qualification, 13.0% of the participants had WAEC/SSCE, 23.7% had OND/NCE, 52.9% had B.Sc./HND, while 10.4% had M.Sc./MBA. The implication of this was that the targeted sets of youths were those who benefitted

most, that is, the young and jobless graduates in the country. The distribution further exhibited that 25.0% were in Health, 15.4% in Agriculture, 19.5% as Technologists while 40.1% were in Teaching. It could be inferred from this that youths in education that benefitted most would be able to give their best in terms of their wealth of acquired knowledge to their younger ones in the primary and secondary schools. In addition, 7.8% of the participants have been in the schemes for 6 months, 20.6% for 1 year while 43.8% have been there for 2 years and above. This indicated that most participants have enjoyed the government’s scheme (N – Power) quite reasonably, and it have thus, ameliorate their sufferings occasioned by their initial joblessness in the county.

Testing of the Hypotheses of the Study

Ho₁: There is no significant impact of the government’s introduced empowerment schemes on the youths’ employment generation in Abuja (FCT).

Table 2: Summary of Regression Analyses on Impact of the Government’s Introduced Empowerment Schemes on the Youths’ Employment Generation in Abuja (N=305)

Variable	B	SEB	β	t	p
(Constant)	5.610	.201		27.945	.000
Empowerment Schemes	.523	.049	.481	10.725	.000
R		.481			
R ²		.231			
Adj. R ²		.229			
F		115.033*			

*p < .05. Dependent Variable: youths’ employment generation

Source: Authors’ Computation, 2022

Table 2 showed the impact of the schemes on the youths’ employment generation in the FCT. It was presented that government’s introduced empowerment

the impact of the government’s introduced empowerment schemes on the youths’ employment generation yielded a coefficient of a multiple correlation (R) and square (R²) of .481 and .231 respectively. These values were statistically significant at 0.05 probability level. In other words, government’s introduced empowerment schemes could account for 23.1% of the observed variance in the youths’

employment generation. Thus, the stated null hypothesis was rejected. This implied that there was a significant impact of the government’s introduced empowerment schemes on the youths’ employment generation in Abuja. This result validated the findings of Emeh (2012)’s study which confirmed significant impact of empowerment programmes on the employment situation in the Lagos State.

Ho₂: There is no significant impact of N - Power scheme on the youths’ self-reliance in Abuja Metropolis.

Table 3: Summary of Regression Analyses on N-Power scheme on the youths’ self-reliance in Abuja Metropolis (N=305)

Variable	<i>B</i>	<i>SEB</i>	β	<i>t</i>	<i>p</i>
(Constant)	5.438	.181		29.999	.000
N - Power scheme	.387	.045	.407	8.702	.000
<i>R</i> ²		.407			
<i>R</i> ²		.165			
<i>Adj. R</i> ²		.163			
<i>F</i>		75.718*			

*p < .05. Dependent Variable: youths’ self-reliance

Source: Authors’ Computation, 2022

Table 3 presented the impact of the N - Power scheme on the youths’ self-reliance in Abuja Metropolis. It was exhibited that the impact of the N - Power scheme on the youths’ self-reliance yielded a coefficient of a multiple correlation (R) and square (R²) of .407 and .165 respectively. These values were statistically significant at 0.05 probability level. In other words, the N - Power scheme could account for 16.5% of the observed variance in the youths’ self-

reliance. The stated null hypothesis was then rejected. This suggested that there was a significant impact of the N - Power scheme on the youths’ self-reliance in the FCT. This finding was in contradiction with the Dauda et al. (2019)’s research that established non-existence and insignificant link between the N-power scheme and any of the following variables, employment generation, poverty lessening and skill acquirement.

Conclusion and Recommendations

Conclusion

The fact that youth unemployment is widespread in Nigeria is self-evident. Its concurrent implications on both the youth and the entire country cannot be ignored as they result in withering of agricultural techniques, persistent poverty, hunger, social vices and insecurity at an alarming pace in Nigerian society. It is therefore unfortunate that young individuals and graduates who are competent, eager, and able to work cannot find work and hence, earn nothing. As a result of this, they cannot handle any household or societal obligations that loom over them at all times for the reason that such people are dissatisfied. These frustrated youth form time-bomb and are susceptible and can be manipulated by unscrupulous forces in society to perpetrate all manner of crime and mayhem, which they would properly despise if they were gainfully employed. Youth empowerment and development, as plain as they are, are the magic batons that can change the story over time.

However, resulting from the finding of this study, it could be concluded that Federal government's introduced youth empowerment scheme such as N – Power had significant and positive impact on the youths' employment in the country.

Recommendations

Following the findings of the study's analysis, the following recommendations were made:

- i. Governments should take steps to improve the country's unemployment condition. One way to achieve this is to have a critical review of all policy schemes targeted at youth empowerment and development activities so as to minimize replication and clashes in operational sectors. Also, these schemes should not be forgone on the platform of political suitability; rather, they should be appraised based on their potential to achieve the goals for which they were developed.
- ii. Governments should mandate financial institutions to expand their activity further than their existing "comfort zones," like National Youth Service Corps (NYSC) and local government, etc., while the ongoing enlightenment and education programmes about the opportunities that exist in the environment should be effectively implemented.

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Management Factors Affecting Lecturers Performance: A Systematic Review and Synthesis for Future Research

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Abstract

This paper offered a systematic review of literature on the empirical studies on managerial factors affecting university lecturers' performance. In line with that, the paper reviewed empirical studies conducted on African universities. Specifically, the included papers referenced how at least one managerial factor influences lecturers' job performance in an African university. Employing systematic review methodology, we selected 92 English empirical articles on the subject as the sampled data. Results revealed that training, remuneration and performance management system are the most important predictors of job performance among lecturers in African public universities. As such, this paper provides future researchers a roadmap on managerial factors research. For practitioners, the study offers a guideline for successful use of managerial factors and how they affect lecturers' performance in public university setting.

Keywords: Universities; management factors; lecturers' performance; systematic review

Introduction

African universities like other universities across the globe were established based on clear mandates: teaching research and community service. These universities are the apex and heart of tertiary education, and are much often regarded as the key and drivers for development (Muturi, Sagwe, Cheruiyot & Maru, 2013; Zeleen, 2012). Universities, as opined by Alessandrini, Klose and Pepper (2013) are the principal agents that facilitate the advancement of scientific discoveries. The emphasis on research and training placed on universities makes them distinct from other tertiary institutions of learning. The lecturers in

these noble institutions play an active role in proffering solutions to numerous emerging challenges affecting the globe – malnutrition, poverty, disease, etc by developing new technologies that ameliorate them (Muriisa, 2014; Wolson, 2007). University lecturers are the key facilitators of academic learning and their competencies and performance undoubtedly affect students' learning and the institutions general performance (Haddad & Taleb, 2016; Karuhanga, 2015; Masron, Ahmad & Rahim, 2012; Kairuz, et al. 2016).

Several studies suggested that managerial factors influence lecturers' performance. For

instance Sukirno and Siengthai (2011) discovered that participatory decision making enhance lecturers' performance through energizing them, unleash their creativity and get them to 'buy into the restructuring agenda'. Quality teaching assessment was also discovered by Andreu, et al. (2006) to boost lecturers' performance through providing them with information concerning their strengths and weaknesses, which help them, acquire and deploy new skills during lectures delivery. Türk, (2008) found that good reward system has led to a highly motivated lecturers that equally boost their research performance over time. More so, a study conducted by Masron, Ahmad and Rahim (2012) revealed that sticking to a well-developed Key Performance Indicators (KPIs) comprising teaching, supervision, research, publication and consultancy improve university academic staff performance. While on the contrary, poor bureaucratic practices have been found to result in negative employee commitment as reported by Palladan (2021). Thus, through analyzing 92 previous studies, a detailed and comprehensive study on several managerial factors will be made available to scholars that would allow for better understanding of

the factors as well as suggest avenue for those that want to study on the area. Hence, we systematically review managerial factors that affect lecturers' job performance in African universities with the aim of developing a model for managerial factors and equally push for future research agenda.

Methodology

Research Approach

The procedure for conducting this review was shown in Figure 1. The initial step for successful commencement of this systematic review entails searching of databases for articles related to managerial factors in Africa. Automatic search was conducted in specific popular databases that included Emerald, JSTOR, Science Direct, Wiley Online Library, Taylor and Francis, Google scholar and Springer. Articles titles, abstracts, keywords and full texts were searched using different combinations of keywords - "Managerial Factors" AND "Academic Staff Performance in Africa", "Managerial Factors" AND "Lecturers Performance in Africa", "Managerial Factors" AND "Faculty Performance in Africa", "Managerial Factors" AND "Teachers Performance in Africa"

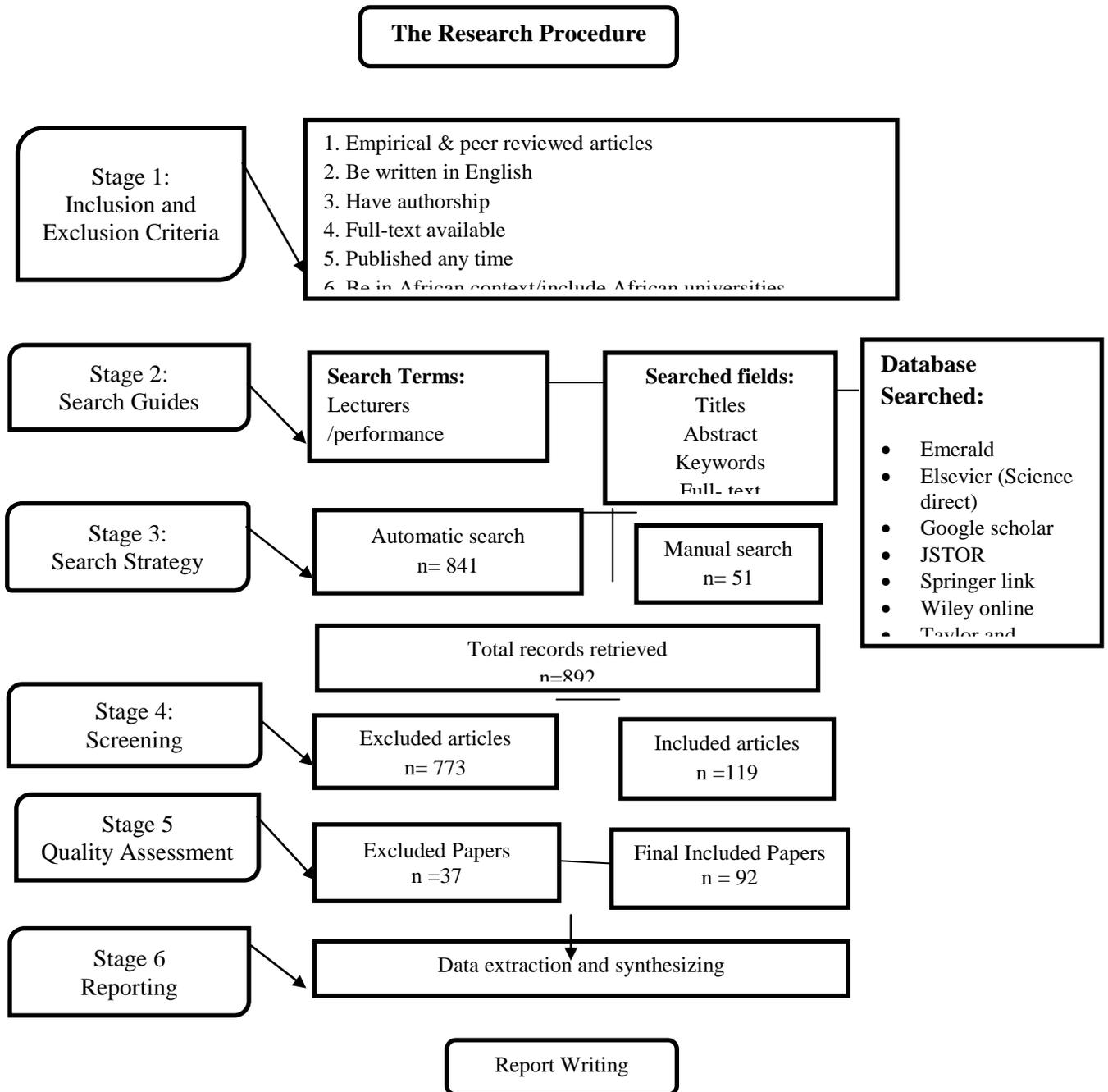


Figure 1

The Systematic Review Procedure

A suggested Linnenluecke, Marrone and Singh, (2020), we scanned throughout the titles, keywords, abstracts and in some cases the whole paper to extract the included managerial factors. Further as postulated by

Xiao and Watson (2019), we resolved any difference and disagreement about any factor that looks ambiguous through consensus. There is no restriction in years for the studies retrieved. This is to enable

inclusion of all relevant articles that discussed at least one of managerial factor that might affect lecturers' job performance in African context. Further, in conformity with Tonhäuser and Bükler (2016) rigour guideline, the study restricted itself to empirical papers emanated from doubled blind review process only. More so, we equally carried out Quality Assessment (QA) on the targeted articles. The QA was guided by the checklist proposed by this study in line with Bandara, Miskon and Fieft (2011) guidelines. The QA questions are:

QA1: Does the article's title related to lecturers' performance?

QA2: How adequate is the article methodology of the study?

QA3: Was the context in which the study conducted clearly reported?

QA4. Does the included paper reported at least one managerial factor?

Upon applying the above QA questions on each article, Nidhra, et al.'s (2013) criteria that its score ranges for 0 to 6 points was equally used to score the articles. '0 point' connotes the least score while '6 point' denotes the highest score. The outcome of QA led to removal of further 37 papers. Finally a total of 92 articles were considered suitable for further analysis. In all, we arrived at twenty seven (27) factors that we all agreed affects lecturers' job performance in African public universities (Figure 1). Some article offered only one managerial factor while others provide as much as five factors.

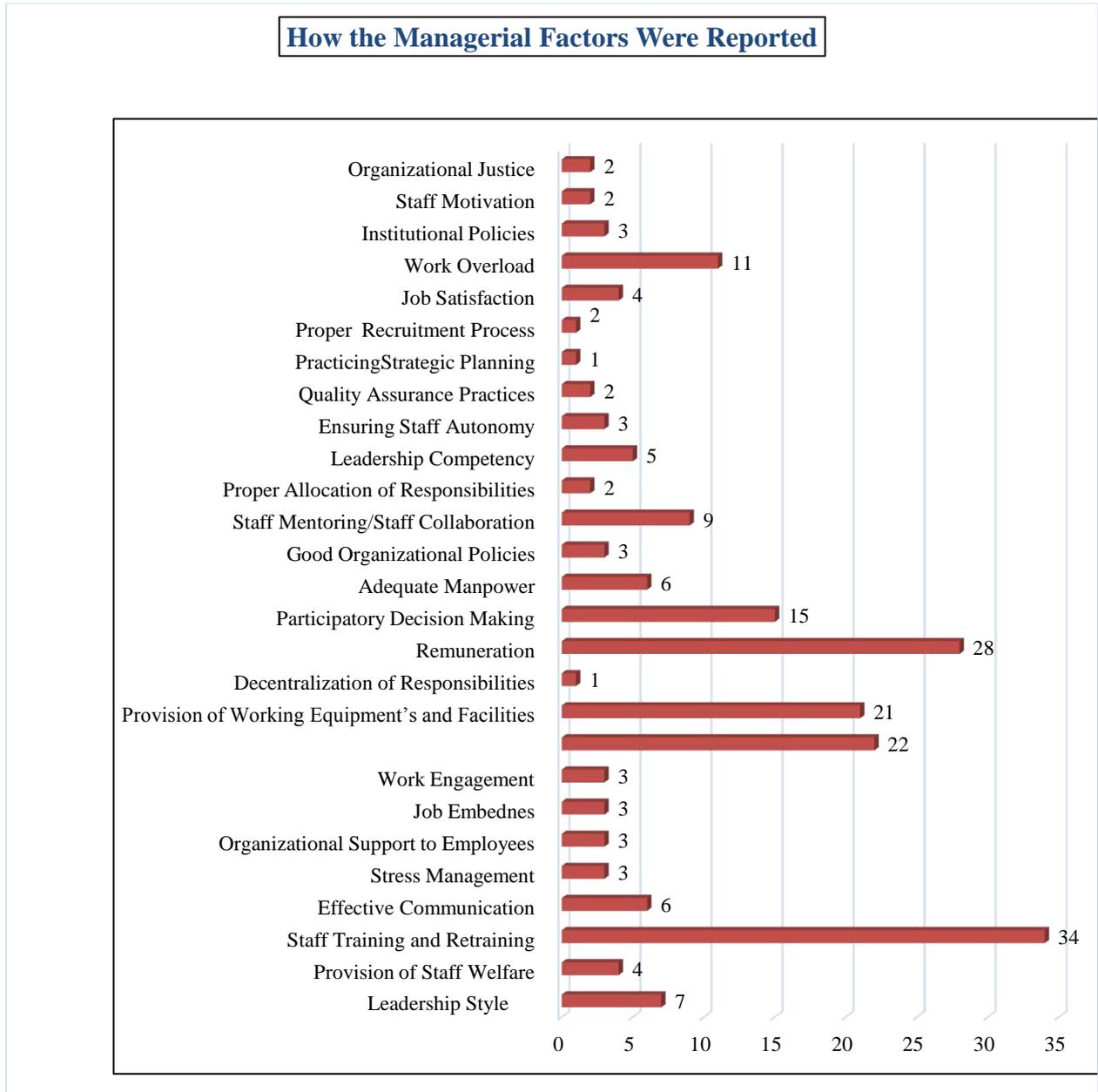


Figure 1
Reported Managerial factors

Presentation of Results

Article Numbers and Spread Patterns

The final sample of the study is made up of 92 articles. Out of this number, 73 papers representing 79.3 per cent of them were published between 2010 and 2020. This indicates that the prevalence of online research article publications by African

academics has become more pronounced from the year 2000. This could be discerned from the huge systematic reviews on African context that reported similar findings (c.f Atatsi, Stoffers & Kil, 2019; Bervell & Umar, 2017; Kaliisa & Picard, 2017; Khalid & Pedersen, 2016). This period could be regarded as the new dynamism online article

publication in Africa. As for geographical spread of the articles, Nigeria and South Africa has the highest number of published articles that discussed managerial factors affecting university lecturers' job performance. In the selected data, Nigeria contributed 31 articles (33.7%) in addition to one article coauthored with South Africa. South Africa has produce 24 articles (26.1%) apart from another three articles coauthored with Nigeria, Zimbabwe and Botswana. West Africa has the highest published articles of 38 (41.3%) and followed by South African sub-region with 32 articles representing 34.9% of the sample. Fewer articles came from Eastern African sub-region with 22 published articles (23.9%). On this base, we now explore the theoretical frameworks of these publications

Co-authorship, Collaboration and Citations

Atatsi, Stoffers and Kil, (2019) posited that having collaborative effort in authorship among most scientists is not only desirable but necessary. In line with this, 63 articles representing 68.5% of the reviewed articles were co-authored by between 2 to 10 authors. Wuchty, Jones and Uzzi, (2007) argued that social sciences articles nowadays are mostly co-authored by two authors and the trend is growing into larger teams of co-authorship. Further, the review

equally suggested collaborative authorship among researchers from different African countries, institutions and disciplines. For instance, authors of 18 studies representing 19.6% of the sample came from different disciplines; while 16.3% (15 papers) were co-authored by scholars from different institutions. Again, 9 papers representing 9.8% of the reviewed articles were as result of collaboration of authors from different countries. Onyancha and Ocholla, (2007) posited that collaboration among scholars allows researchers from different backgrounds to share skills, knowledge and techniques that lead to broadening the researchers' network and equally facilitate intellectual companionship. Collaboration was also found to significantly effects success of proposals submitted for research grants (Lee & Bozeman, 2005). The study also examined the level of citation for the included papers. Google Scholar citation was used for this assessment because the search engine is a promising tool for assessing journal impact (van Aalst, 2010). Further, Google scholar citation is said to be a reliable source that has global recognition due to its true reflection of lecturers' research performance (Nafukho, Wekullo & Muyia, 2019). In line with this, 33 papers (35.9%) were cited between 10 to 50 times, while 20 articles (21.7%) were cited 51 times and above. Taken it together, 57.6% amounting to 53 reviewed articles were cited

10 times and above. Nonetheless, since 30.2% of the included articles were published just three years back (2017 to 2020); they might not have attained a high number of citations within three years (Asadi, Abdullah, Yah & Nazir, 2019). The three most cited articles are Ssesanga and Garrett, (2005) with 315 citations, Rothmann and Jordaan (2006) with 209 citations and Barkhuizen and Rothmann (2008) that has been cited 205 times. The review also revealed that articles written by more than one authors enjoyed more citations than single author papers. Precisely, 34 (36.9%) articles written by 2 to 5 researchers were each cited 10 times and above. Conversely, only 19 papers (20.6%) singled-authored were cited 10 times and above each. Literature attests that multiple authored papers have highest opportunity of being cited than singled authored papers. Figg, et al. (2006) and Bornmann (2017) suggested that the number of citations an article received has significant correlation with the number of its authors. Further, researchers that manage their collaboration well; tend to produce a superior work that results in a higher impact (Figg et al., 2006). Smart and Bayer, (1986) posited that this practice is more popular in multi-authored articles in management sciences.

Research Design and Sample Size Employed by the Studies

All the included articles used primary data collected either through questionnaires or interviews. One of the probable reasons behind this is in general; having access to secondary data is one of most daunting challenge for researchers in Africa (Kolk & Rivera-Santos, 2018; Vigan & Giauque, 2018). Looking at the research design employed by the studies, it showed that 71 papers (77.2%) were quantitative, 11 papers (11.9%) were qualitative while 11 papers represented by 11.9% adopted mixed method design. Quantitative research is the most popular design mostly adopted by African researchers. The adoption of mixed method approach is becoming more pronounced as well (c.f. Bervell & Umar, 2017; Kaliisa & Picard, 2017).

Integration of qualitative and quantitative paradigms in single study leads to mutual validation of data and production of more coherent findings (Kelle, 2006). And much often, results from mixed method studies are superior compared to mono-method research studies (Johnson & Onwuegbuzie, 2004). Further, 17 (19.8%) of the papers used adopted multi-source response in order to ensure data reliability and also to avoid common method bias problem (Podsakoff et al., 2003; Tehseen, Ramayah & Sajilan, 2017). Additionally, sample sizes range

from 35 to 3,533 respondents for quantitative studies, while 4 to 30 informants was the range for qualitative articles. The research conducted by Czerniewicz and Brown (2009) has the highest number of sample size. This large sample might be connected with the email questionnaire used to cater for non-response bias, since response rate on email questionnaires has been reported to be very low in Africa. Descriptive statistics dominated the techniques used by the sampled studies in their data analysis with 37.2%. This was followed by regression and correlation with 12.8% each. 6 articles representing 6.9% used structural equation modeling (SEM) technique. More so, 36.0% of the included articles used a single method for data analysis. Equally, 36.1% included studies went for two data analysis techniques, while 4.7% and 1.2% of the papers used 4 and 5 techniques for data analysis respectively. Pertaining use of theories by the included studies, only 15 papers amounting to 16.3% used theories to underpin their findings, while the remaining 77 studies representing 83.7% used no single theory.

Assessing Lecturers Job Performance

The included studies used several words to refer to lecturers' performance. Out of 92 included papers, 45 papers (48.9%) used the word 'performance' and 13 articles

represented by 14.1% opted for 'productivity'. Looking closely on how the studies used these two variables, one will discern that both performance and productivity means the same thing for the studies, with exception of Maina and Nzuki, (2015) that used performance for lecturers and productivity to refer to universities performance. Performance connotes excellence, and comprises productivity, profitability, as well as other non-cost related aspects like flexibility, quality and speed (Hanaysha, 2016). Literature suggests that it is difficult to define and conceptualize employee productivity. The most popular definition of productivity refers to the quantities of input factors employed by a system to produce output (Pekuri, Haapasalo & Herrala, 2011). Apart from this, other definitions and conceptualizations abound. Conceptualization and definition of productivity seems to be contingent to the authors' point of view and the context they use. Thus, performance has become a concept that is most frequently confuse with productivity by many researchers (Pekuri, Haapasalo & Herrala, 2011). This may probably explain the mixed usage of performance and productivity by the studies.

The remaining 32 (36.9%) studies used different words to show effect of managerial factors they reported on lecturers' job performance. For instance, lecturers' job

satisfaction was reported six times by different authors. Further, Kiplangat, Momanyi and Kangethe (2017) reported that university leadership style and shared governance structures leads to lecturers' job satisfaction in Somaliland. Lecturers' quality service delivery on research activities in South African university was equally attributed to effective performance management practices as posited by Leibowitz, Bozalek, Van Schalkwyk and Winberg (2015). Other variables reported suggesting lecturers' performances by the studies include turnover intention, career advancement, lecturers' commitment and motivation etc.

Dimension of Lecturers Performance Reported

The common practice is to conceptualized lecturers' job performance into three main dimensions viz research, teaching, and service (Gaus & Hall, 2016). The included studies took different approaches to linking their reported managerial factors to lecturers' performance. 51 studies connoting (55.4%) referred to general lecturers' performance without making any reference to a particular dimension of it. More so, 10.9% of the papers (10 articles) were specific in mentioning teaching, research and service as dimensions of lecturers' performance they focused on. 7 included papers (7.6%) related performance to

managerial factors on teaching and research only, while 15 studies (16.3%) devote on teaching. Again, 8 articles (8.7%) banked on research; and only one article (1.1%) linked its reported managerial factors to research and service as dimensions of lecturers' job performance. Taken it together, the sampled studies focused more on teaching than any other dimension of lecturers' performance. This is not surprising since most African universities are struggling to contain the problem of accessibility that deprives them from paying much attention that research deserves (Sawyer, 2004).

Future Research and Conclusion

Overall, this systematic review provided a background for meta-analysis study on managerial factors that influence lecturers' job performance in Africa. Although this study is not exhaustive, yet it has offered a review of relevant studies on managerial factors that affect performance. This review strongly agreed with Horwitz, (2015) and Kamoche et al. (2012) that advocated for a shift in human resource researches in Africa lamenting the unsuitability of Western managerial paradigms and practices presently used in some studies. Horwitz, (2015) advocated for African management paradigm and 'not-invented-here syndrome'.

Again, breakdown of the included researches regarding the managerial factors suggested the existence of plentiful factors that relate to lecturers' performance. The analysis equally showed several positive and consistent relationships between different managerial factors and the three dimensions of lecturers' performance. Predominantly, the dimension of teaching has been researched relatively well, with results showing training, remuneration, equipment and facilities, performance management system, and participatory decision making to be key factors predicating performance for the university teachers.

Another area of concern is the use of intervening variables by the studies. Apart from Atatsi et. al. (2020) that employed organizational citizenship behaviour to mediate between leader member exchange and lecturers performance and David and Rahim (2012) that used ICT tools and awareness strategies as moderating and mediating variables respectively, the other sampled studies only modelled their researches on direct relationships. Torraco, (2005) proclaimed that integration of intervening variables in research models can lead to better understanding of meanings, better synthesization and effective conceptualizations of areas being researched. This indicates that relationship among predictors, moderators and mediators

and their causal relationships are yet to be fully explored. Therefore, future researches should focus on broad and integrative approach in determining the effects of managerial factors on lectures' performance in African universities.

Though this study showed relative progress in terms of inter-country collaboration among African scholars with nine (9) papers co-authored by different researchers from various countries (c.f. Bigirimana & Sibanda, 2016; Bigirimana & Sibanda, 2016), yet there is still need for more collaborations among scholars across countries as this will facilitate production of collaborative knowledge (Onyanha & Maluleka, 2011). Thus, more collaboration in terms of inter-institutions, inter-disciplines and precisely inter-countries is strongly recommended. Likewise, given the diversity and complexity of Africa, the potentiality of and significance for comparative researches between countries and regions is also encouraged. So far, studies on managerial factors as they relate to lecturers' performance in African universities are more pronounced in Nigeria, South Africa, Kenya and Ghana. Hence, there is need for African scholars to engage in comparative studies on any managerial factor that may influence university lecturers' performance in particular and human resources in in general (Horwitz,

2015). Garrett (1999) averred that lecturers' context and working attitudes are well connected in a complex manner and warrants better understanding.

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Impact of Corporate Social Responsibility on Enhancing Business Performance in Nigeria: A Study of Kedco

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Abstract

This study examined the impact of corporate social responsibility on enhancing business performance in Nigeria. The specific objectives are impact of philanthropic Social Responsibility on business performance of KEDCO; impact of legal Social Responsibility on enhancing business performance of KEDCO; impact of economic Social Responsibility on business performance of KEDCO; and impact of ethical Social Responsibility on business performance of KEDCO Barnawa unit Kaduna. The study adopted survey research design, primary data was used for the research and structured questionnaire was employed for data collection. The population of the study comprised all the 83 permanent staff of KEDCO Barnawa, and thus, the study used census strategy. Multiple linear regression was employed to test the research hypotheses. The findings revealed that Philanthropic Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna, Legal Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna, Economic Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna and Ethical Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna. Based on these findings, the study concluded that CSR helps to improve business performance of KEDCO, Barnawa Business Unit, Kaduna. Therefore, the study recommended that KEDCO should consider CRS as part of its daily operating activities for Barnawa Business Unit, Kaduna to grow and realize its dreams. This would see KEDCO engaging itself morally to improving the society's living standards.

Keywords: Corporate, Social, Responsibility, Business, Performance

Introduction

Businesses are under a lot of pressure to accept responsibility for their effects on the society and surroundings in which they operate. They are anticipated to actively participate in the advancement of civilization. These calls for responsible business practices and corporate contributions are normally framed in terms of Corporate Social Responsibility (CSR). The traditional idea that a company's only

goal is to create value for shareholders has been replaced by the knowledge that businesses can and should play a significant role in their communities, both locally and globally, while still turning a profit. Many firms are currently moving forward with CSR in their operations (Carroll, 2020).

Many company executives are understanding that CSR, along with more traditional business strategies like marketing, branding, R&D, innovation,

people management, and operations is a viable part of their entire business plan. A growing number of businesses in practically every industry are embracing CSR concepts and starting CSR programmes as CSR is increasingly acquiring corporate mindshare. As a result, they are starting to pay CSR strategy the same degree of attention as they do to other important corporate tasks, and even better, they are beginning to integrate their CSR strategies into their branding, marketing, and operations (Deegan, 2019).

CSR has become a standard practise among businesses in Nigeria. It is one of the modern management methods used by businesses to aim to have a positive influence on society while conducting operations. Many justifications have been put out to explain why businesses willingly participate in CSR initiatives. Many businesses engage in CSR initiatives to meet their fundamental needs of coming across as respectable or reasonable members of society. According to Garriga and Melé (2020), this legitimacy has encouraged businesses to pursue their main goal of achieving sustainable performance.

Despite the fact that companies contribute significantly to societies' economic well-being, there are growing worries that societies offer corporations excellent possibilities to conduct their operations

using public resources (Gjlberg, 2019). As such, majority of rules and regulations are created in response to public uproar, which jeopardise businesses' efforts to maximise profits and, consequently, the interests of shareholders. If there were no public outcry, there would be little to no regulation (Idowu & Papasolomou, 2021).

Although the idea of CSR as a strategy is becoming more prominent in Nigerian policy discussions, it is not extensively employed and is typically connected to charity. Numerous corporate endeavours and projects involving private sector can be categorised as manifestations of CSR. Additionally, there are developing specialised CSR organisations. According to surveys, most customers favour buying from socially conscious businesses and brands (Jenkins, 2020). The benefits of social responsibility have been recognised by many investors as the concept of CSR matures and its adoption is growing as businesses allocate strategic capital to it (O'Riordan & Fairbrass, 2017).

In the extant literature such as the work of Mwangi and Jerotich (2013) and Abdullahi and Bala (2015) seem to have focused more attention on financial sector and other sub-sectors of manufacturing industry while ignoring the strategic importance of firms in energy sector in Nigeria. Also, most of the

previous studies stopped at 2018 financial year without capturing the impact of Post Covid-19 pandemic with regards to provision of CSR. Therefore, this study is an attempt to fill all these literature gaps left in the previous studies.

Objective of the Study

The study generally seeks to examine the impact of CSR on business performance of KEDCO, Barnawa Business Unit, Kaduna.

The specific objectives are to:

- i. investigate the impact of Philanthropic Social Responsibility on business performance of KEDCO, Barnawa Business Unit, Kaduna,
- ii. explore the impact of Legal Social Responsibility on business performance of KEDCO, Barnawa Business Unit, Kaduna,
- iii. examine the impact of Economic Social Responsibility on business performance of KEDCO, Barnawa Business Unit, Kaduna, and
- iv. find out the impact of Ethical Social Responsibility on business performance of KEDCO, Barnawa Business Unit, Kaduna.

The following hypotheses were formulated in line with the above set out specific objectives of the research.

H₀₁: Philanthropic Social Responsibility has no significant impact on business

performance of KEDCO, Barnawa Business Unit, Kaduna.

H₀₂: Legal Social Responsibility has no significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna.

H₀₃: Economic Social Responsibility has no significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna.

H₀₄: Ethical Social Responsibility has no significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna.

This paper is organized into five sections with this section being the introduction. Section 2 deals with the review of related literature. Section 3 is dedicated to the methodology of the study. Section 4 presents and discusses the result of the data analysis. Section 5 concludes the study by drawing emphasis on the findings and the policy implications of the outcome.

Literature Review

Conceptual Review

Concept of Corporate Social Responsibility

A company has a responsibility to operate in a way that helps a society according to the ethical theory of corporate social responsibility (CSR). Every person has a responsibility to preserve the equilibrium

between the economy and ecosystems (Sarbutts, 2020). According to Lathan (2020), social responsibility is the duty to uphold the principles, decisions or courses of action that are desirable in light of the aims and ideals of society. Companies should participate in CSR for both their own and society's sake. Companies have a responsibility to support the communities in which they operate and they should identify their stakeholders and understand what they anticipate from the company (Lathan, 2020). As a result, in order to address corporate social responsibility successfully, businesses should identify their stakeholders and what they anticipate from the organisation.

The four basic areas of CSR activity are charitable, legal, ethical and economic. According to Sotorro and Sánchez (2019), such classification presupposes adherence to the CSR principles wherein a company's obligation to the community is based on routine profit maximisation, observance of the law, moral duty and charitable endeavours. The idea of corporate social responsibility (CSR) is based on the interaction between business and society as well as how businesses behave toward their key constituencies including their staff, customers, suppliers, investors, local community and special interest groups (Turker, 2017).

Concept of Performance

Performance refers to an organization's actual output or outcomes as compared to its intended aims and objectives. The balanced scorecard emphasizes four viewpoints such as financial, customer, internal company process and learning and growth perspectives (Vance, 2019). The idea of assessing the output of a certain process or procedure then changing the process or method to enhance the output, increase efficiency or raise the effectiveness of the process or procedure is known as organizational performance (Cooper & Schindler, 2016). Organizational performance refers to both human performances such as that of an athlete and organizational performances such as that of a racing team, a business, a farm or even cattle operation.

The main objectives of organizational performance are to improve the organization's capacity to supply goods and/or services through increasing organizational effectiveness and efficiency (Fama & French, 2018). Organizational efficacy which encompasses the process of creating organisational goals and objectives in a continuous cycle is another component of organisational performance that occasionally focuses on continuous improvement. At the operational or individual employee level, organisational

performance frequently incorporates procedure like statistical quality control. Customer satisfaction surveys which are intended to gather qualitative data on performance from the viewpoint of customers are a common example of softer kinds of measurement used to assess performance at the organizational level (Fernandez, 2016).

Theoretical Review

For this study, stakeholder theory and legitimacy theory have been found to be the most appropriate theories that can underpin this study.

Stakeholder Theory

Stakeholder theory is another relevant premise that addresses organizational performance matters. Freeman (1984) proposed the theory which states that businesses and other structured organizations may have an impact on stakeholders in either a good or bad way. By definition, a stakeholder is a person or group of people who stands to gain or lose from an organization's success or from its negative actions or failures (Fontaine, Haarman, & Schmid, 2006). Additionally, a collection of different stakeholders with the primary goal of managing their interests is referred to as an organisation in this context. Customers, society, suppliers, workers, shareholders and other nearby business entities make up the

majority of stakeholders (Friedman & Miles, 2006).

In order to clarify the function of KEDCO, Barnawa Business Unit, Kaduna, as well as its relevant policies for philanthropic social responsibility, legal social responsibility, economic social responsibility and ethical social responsibility, this study applied the stakeholder theory. To support the process of achieving organizational growth and success which should show an increased business performance, the firm management must start helpful contributions and interactions to and with their stakeholders. This hypothesis is consistent with our study since it encourages investment in initiatives that raise social wellbeing. Additionally, it claims that spending money on building positive connections with stakeholders enhances corporate success. The study assumptions on the nature of the link between the dependent and independent variables have therefore been guided by the theory.

Legitimacy Theory

Guthrie and Parker (1989), proponents of the legitimacy theory contend that businesses are constrained by the social contract which requires them to carry out a variety of socially desired actions in exchange for acceptance of their goals and other benefits and that this ultimately

ensures their survival. According to Garriga and Melé (2020), legitimacy is defined as a general interpretation or conclusion that a person's action within a socially formed system of rules, principles, beliefs and meanings is acceptable, reasonable or suitable. The hypothesis suggests a link between community and culture. Organizations are a component of society that function as a result of support from various social segments.

Regardless of how an organisation perceives its level or status of legitimacy, legitimacy approaches may be adopted (Jenkins, 2020) to either increase, maintain or defend that legitimacy as well as to control any perceived or actual legitimacy gaps that may arise in the wake of challenges to such legitimacy (Gichohi, 2018). According to the principle, businesses, which are at the heart of CSR, aim to function within socially acceptable bounds. From a larger political and economic standpoint, the theories of stakeholders and legitimacy were created. Even though they are separate, we also consider how an organisation interacts with its operational environment.

Empirical Review

Abdulrahman (2014) examined the influence of corporate social responsibility on total assets of quoted conglomerates in Nigeria using secondary source of data from annual

reports of quoted conglomerates in Nigeria. the study used fact books of Nigerian Stock Exchange (NSE) for the period of (2006-2011) by means of census approach. The study also used regression and correlational analysis in interpreting the result of the formulated hypothesis. Based on the outcome of the result, it showed that there is a strong positive relationship between CSR and TA and it is significant at 1%. This gave us the basis of rejecting the null hypothesis. Therefore, the study recommended to the conglomerates companies to take CSR commitment as an important mechanism of boosting their total assets of an organization. This is because the more you committed yourself to corporate social responsibility the more investors and consumers are patronizing your shares and products respectively and the more the economies of scale, vice versa.

Pan, Sha, Zhang and Ke (2014) studied the relationship between CSR and financial performance of listed firms in China using the sample size of 228 firms for the period of 2010 to 2013. Generalized least square multiple regression was used as statistical tool of analysis of the secondary data collected for the study and found evidence of negative insignificant association between CSR and financial performance of the companies.

Jitaree (2015) examined the effect of CSR on financial performance of listed companies in Thailand for the period of 2009 to 2011 using the sample size of 323 companies. Ordinary least square multiple regression was used as technique of analysis of the secondary collected from the annual reports and accounts of the selected companies for the study. The result showed that there is positive significant correlation between CSR and financial performance of the firms.

Karlsson (2015) studied the effect of CSR on financial performance of listed firms in Sweden for the period of 2009 to 2013 using the sample size of 203 companies. Multiple regression was used as technique of analysis of the secondary data collected for the study. The result of the analysis revealed evidence of positive insignificant association between CSR and financial performance of the companies.

Ni, Egri, Lo and Lin (2015) investigated the impact of CSR pattern and practices proxy by community development and employee relation for 466 firms in mainland China, Hong Kong and Taiwan. The study reveals a positive relation between community development and financial performance in China and Hong Kong but a negative relation in Taiwan. This signified high

community participation due to their nature and culture in china and Hong Kong.

Cavazotte and Chang (2016) explored the effect of CSR on financial performance of listed companies in Brazilian Stock Exchange for the period of 2001 to 2007 using the sample size of 79 firms out of the population of 364 firms. The study adopted two-stage least square equation model as statistical tool of analysis of the secondary data collected from the annual reports and accounts of the firms. The result of the analysis revealed a positive insignificant relationship between CSR and financial performance of the companies.

Amachi (2018) examined the corporate performance (CP) of selected deposit money banks (DMBs) in relation to corporate social responsibility (CSR) practice. Philanthropic responsibilities were used as the sole dimension of CSR, while market share (MS) and liquidity were used as the measures of CP. Using data from the annual reports of five topmost DMBs in Nigeria (FBN, Zenith Bank, GT bank, UBA and Access bank), using regression technique for data analysis, it was found that there is positive and significant association between CSR and MS; and that there is no significant association between CSR and Liquidity. Based on this, it was concluded that banks in Nigeria can improve their market share

through improved CSR practices while liquidity cannot be improved by CSR. The study recommended that CSR practices be fully incorporated into the Nigerian banking sector, with regulatory bodies empowered to ensure conformity to extant rules and standards; banks should view CSR as a means of achieving some corporate objectives; they should liaise with relevant stakeholder groups to develop and execute desired/needed CSR programmes that directly impact on the people; concerted effort should be made by banks to guard against illiquidity due to too much expenses on CSR programmes.

Maqbool and Zameer (2018) evaluated the link between CSR and financial performance by empirically analysing Indian banks. The study focused on twenty-eight banks listed on the Bombay Stock Exchange. The descriptive study evaluated the performance of the listed banks over a 10-year period from 2007 to 2016. The researchers incorporated risk, age, capital intensity and size as control variables. The study concluded that CSR positively impacted on profitability and stock returns of listed banks in India. The researchers concluded that in the Indian context, it pays to be socially responsible.

Gichohi (2018) sought to explore the impact of CSR in the performance of firms listed on the Nairobi Securities Exchange (NSE) from

a financial perspective. The researcher adopted a research design that was descriptive to define the association between the research variables. Gichohi (2018) studied all the sixty-six companies listed on the NSE from 2010-2014. The researcher relied on secondary data which was sourced from financial results, company reports, and website material of the listed firms. The research concluded that a positive but insignificant correlation between CSR and financial performance of listed companies on the NSE existed. Based on the findings, Gichohi (2018) recommended that firms should not only embrace to undertake CSR voluntarily; rather, regulators should demand that firms allocate funds to support communal welfare projects.

Mungai (2018) conducted a local study to determine the impact of CSR on the financial performance of the manufacturing sector players in Kenya. The study targeted sixty-eight manufacturing firms operating in Kenya as of 2014. The study embraced descriptive research design with the data collected analysed using multiple regression model. Mungai (2015) concluded that CSR had little consequence on performance from a financial perspective. The study also revealed that players in the Kenyan manufacturing sector perceived CSR as a voluntary exercise which was embraced

solely to improve the social welfare of communities around them.

Yusoff, Mohamad, and Darus (2018) led research to ascertain the influence of CSR disclosure on the financial performance of publicly listed firms in Malaysia. The study evaluated the published financial accounts of thirty publicly listed companies to ascertain the nature and depth of CSR disclosure. The researchers embraced a descriptive research design and used hypothesis to determine the impact of CSR disclosure on the financial performance of the listed firms. The study found out that there was a significant relationship between disclosing CSR practices and the corporate financial performance of listed Malaysian firms in the subsequent year. The researchers also found out that top performers in the stock market displayed a relatively high breadth of CSR disclosure. The research also concluded that displaying volumes CSR was inconsequential; rather it was the variety of CSR practice.

Platanova and Asutay (2018) conducted a study to determine the impact of CSR disclosure on the financial performance of the gulf region banking sector. The descriptive study evaluated the financial reports of Islamic bank in the Gulf Cooperation Council (GCC) region over a fifteen-year period from 2000-2014. The

study revealed a significant positive relationship between disclosing CSR and future performance of Islamic banks. The observation underscored the importance of CSR activities in positively affecting the financial performance of GCC region Islamic banks. The study concluded that a relationship that was insignificant between individual dimensions of CSR and current financial performance was existent among the banks under review.

Nguyen (2018) sought to determine the effect of corporate social responsibility disclosure on the financial performance of credit institutions in Vietnam. The study examined the financial reports of credit institutions over a six-year period from 2011 to 2016. Nguyen (2018) used content analysis as the research design while ordinary least square estimator analysed the association between the research variables. Nguyen's study concluded that there was a significant negative relationship between CSR disclosure and financial performance of commercial banks in Vietnam. Nguyen (2018) opined that the negative relationship between CSR and financial performance could be explained by laws on CSR in Vietnam and the economic slowdown experienced at the time of the research.

Gangi, Mustili, and Varrone (2019) conducted a study to assess the influence of CSR knowledge on the corporate financial

performance of the European banking industry. The study sought to evaluate the operations of seventy-two banks from twenty European countries over seven years from 2009 to 2015. The empirical study relied on hypothesis to determine the association between the research variables. The research findings revealed that internal knowledge of CSR led to proper implementation of the practices leading to beneficial implications for external stakeholders. The study also revealed that engaging in CSR improves the competitiveness of banks in Europe as customers perceive the bank more positively.

Azumah (2020) examined the impact of Corporate Social Responsibility (CSR) on the performance of manufacturing firms in Nigeria. A case study of Ariaria shoe making and footwear company ltd, Abia State, Nigeria (2005-2006). An ordinary least square regression is applied to annual aggregate data to determine the type of relationship that exist between the dependent and independent variables. A simple linear regression model is used in this study. The dependent variable is the performance indicator while the independent variable is corporate social responsibility expenditure (ECSR). The financial performance indicators include: Profit after tax (PAT), Asset Financial Value (AFV) and

Return on Investment (ROI) while the non-financial performance indicators are; Average Manufacturing Capacity Utilisation (AMCU), Employee's Productivity rate (EMR) and Company's output rate (COR). The technique used in estimating the parameters of the specified model is the Ordinary Least Squares (OLS) estimation method. The results of this study showed that Corporate Social Responsibility Expenditure (ECSR) has a positive and significant impact on the Financial and non-financial Performance of Manufacturing Firms.

Olowolaju and Adelola (2020) assessed the effect of corporate social responsibility on profitability of some selected banks in Nigeria. A sample of five (5) banks out of 23 quoted money deposit banks was selected for the study that covered a period of six (6) years, from 2012 to 2017. Secondary data were used for this study. Data were collected from the published financial statements of the selected bank on the amount spent on corporate social responsibilities and profit after tax of the banks selected for the period under study. Both descriptive and inferential statistics were used to analyse the data. The findings of the study revealed that the major areas were Corporate Social Responsibilities (CSR) are being carried out by the selected commercial banks in the study area include health sector, education sector and provision

of social amenities/community development. It was also concluded that CSR cost has positive effect on profitability of selected banks.

Nzuki and Opuodho (2022) examined the influence of corporate social responsibility on financial performance of listed manufacturing firms in Kenya. The specific objectives of the study were to establish the influence of environmental responsibility, CSR initiative on public education, corporate philanthropy on financial performance of listed manufacturing firms in Kenya. The theories that anchored the study comprised of Triple Bottom Line Theory, Integrative Social Contracts Theory and The Stakeholder Theory. A descriptive research design was employed in the study and the target population comprised ten listed manufacturing firms in Kenya. The units of observation comprised employees from upper, middle and lower management levels. A total of 90 employees were targeted. The study used questionnaires to gather primary data and secondary data was acquired from financial reports of the selected firms. Both descriptive and inferential statistics were employed in analyzing the collected data. The statistics were generated through Statistical Package for Social Scientists and MS Excel. The findings of the study revealed that environmental responsibility and corporate

philanthropy bears a positive and significant influence on the levels of financial performance of listed manufacturing firms. This is shown by beta values of 0.197 and 0.271 and significant values of 0.0122 and 0.0136 respectively. The results implied that increasing either environmental responsibility or corporate philanthropy with one-unit results can increase the levels of financial performance of listed manufacturing firms in Kenya with respective beta values. The study further revealed that CSR initiative on public education bears a positive but insignificant influence on financial performance of listed manufacturing firms in Kenya. This is shown by a beta value of 0.101 and an insignificant value of 0.0743. This bears the implication that increasing CSR initiative on public education with one-unit results to insignificant increase in the levels of financial performance of the listed manufacturing firms.

Research Method

This research used survey research design. Survey research design is appropriate because was used because it assists in understanding the influence of CRS on business performance and therefore answers the research objectives. The population of the study is all the 83 permanent staff of KEDCO, Barnawa and census was used for the study. The justification for choosing

Barnawa Business Unit is that to the best of our knowledge, there is paucity of research on CSR and performance in the sector and census was used to capture the sample. The study only used primary data. Descriptive statistics was used to determine the influence of CRS on business performance of KEDCO, Barnawa Business Unit, Kaduna. The model adopted consists of five variables. The independent variables were the CRS (Philanthropic Social Responsibility, Legal Social Responsibility, Economic Social Responsibility and Ethical Social Responsibility) dependent variable was the business performance. The study used a multiple linear regression model to show the relationship between CRS and business performance of KEDCO, Barnawa Business Unit, Kaduna.

Model Specification

The models used empirically in testing the hypotheses formulated for the study are as follows:

Table 1 Descriptive Statistics

	Mean	Std. Deviation	N
BUSPER	2.0920	1.35542	75
PSR	1.9939	1.28379	75
LSR	2.1288	1.33401	75
ECSR	2.1472	1.33903	75
ETSR	2.1043	1.34078	75

Source: SPSS Output (2022)

The table 1 shows the mean score and the standard deviations from the means of each of the data points collected from the 75

$$BUSPER = f(CSR) \dots\dots\dots (1)$$

$$BUSPER = \alpha + \beta_1PSR_1 + \beta_2LSR_2 + \beta_3ECSR_3 + \beta_4ETSR_4 + \epsilon \dots\dots\dots (2)$$

Where:

- CSR= Corporate Social Responsibility
- PSR = Philanthropic Social Responsibility
- LSR = Legal Social Responsibility
- ECSR = Economic Social Responsibility
- ETSR = Ethical Social Responsibility
- BUSPER = Business Performance
- A = constant
- β= Intercept
- ε= error term

Data Presentation and Analysis

The study sought to determine impact of the four dimensions of Corporate Social Responsibility (CSR): Philanthropic Social Responsibility (PSR), Legal Social Responsibility (LSR), Economic Social Responsibility (ECSR), Ethical Social Responsibility (ETSR) of KEDCO, Barnawa Business Unit, Kaduna. The study relied on descriptive and inferential analysis.

respondents. In the table above, the mean of BUSPER, PSR, LSR, ECSR and ETSR are 2.0920, 1.9939, 2.1288, 2.1472 and 2.1043

respectively. The standard deviations recorded by BUSPER, PSR, LSR, ECSR and ETSR were minimal showing an indication that there was minimal variation in the variables under the study.

Table 2 Correlations

		BUSPER	PSR	LSR	ECSR	ETSR
Pearson Correlation	BUSPER	1.000	.891	.857	.829	.922
	PSR	.891	1.000	.884	.870	.893
	LSR	.857	.884	1.000	.964	.883
	ECSR	.829	.870	.964	1.000	.878
	ETSR	.922	.893	.883	.878	1.000
Sig. (1-tailed)	BUSPER	.	.000	.000	.000	.000
	PSR	.000	.	.000	.000	.000
	LSR	.000	.000	.	.000	.000
	ECSR	.000	.000	.000	.	.000
	ETSR	.000	.000	.000	.000	.
N	BUSPER	163	75	75	75	75
	PSR	163	75	75	75	75
	LSR	163	75	75	75	75
	ECSR	163	75	75	75	75
	ETSR	163	75	75	75	75

Source: SPSS Output (2022)

Correlation coefficient varies from -1 to +1. A +1 coefficient is an indication of a perfect correlation while a -1 shows a perfect negative correlation. In table 4.29, the correlation coefficient for the variables was positive and significant showing a clear indication that there is a correlation between

CSR and business performance of KEDCO, Barnawa Business Unit, Kaduna.

Test of Hypotheses

Regression analysis is used to measure the effect of the independent variable to the dependent variable of hypothesis and proper interpretation and analysis techniques were used to explain the hypotheses testing.

Table 3 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.932 ^a	.869	.844	.41526	.872	2554.242	1	73	.000	1.895

a. Predictors: (Constant), PSR, LSR, ECSR, ETSR

b. Dependent Variable: BUSPER

Source: SPSS Output (2022)

The study sought to establish the joint effect of CSR dimensions on business performance. The model in Table 3 shows that R Square is 0.869, which means that 86.9% of the variation in BUSPER is explained by PSR, LSR, ECSR and ETSR. Additionally, $r = 0.932$, meaning that the correlation between the CSR dimensions (PSR, LSR, ECSR and ETSR) and BUSPER of KEDCO, Barnawa Business Unit, Kaduna is very high. The standard error

shown in the study is .41542 which indicates a high accuracy of the prediction made in this study. R in this study is shown by the correlation coefficient which determines the relationship between the study variables. Durbin Watson value of 1.895 shows there is no autocorrelation. From the above findings, we can, therefore, conclude that there is a positive correlation between the study variables.

Table 4 ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.735	1	5.947	34.487	.000 ^b
	Residual	4.484	73	.172		
	Total	34.219	74			

a. Dependent Variable: BUSPER

b. Predictors: (Constant), PSR, LSR, ECSR, ETSR

Source: SPSS Output (2022)

The ANOVA results show significance of the combined impact of PSR, LSR, ECSR and ETSR on BUSPER. The results show that the model was significant ($F = 34.487$, $p < 0.05$). This indicates that CSR has a significant impact on BUSPER therefore, supporting alternate. The population parameters were found to have a significant p-value of 0% which is lower than the 0.001. This is clear evidence that the data used in

the study was adequate and reliable for concluding the variables under study since the value of significance (p-value) is lower than 5%. The F statistic critical at 5% level of confidence was 34.487, thus, the study concludes that the overall model is fit and that CSR has significant effect on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna.

Table 5 Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.067	.072		.358
	PSR	.790	.032	5.895	.000
	LSR	.608	.025	4.265	.008
	ECSR	.269	.041	18.568	.010
	ETSR	.633	.037	7.652	.000

a. Dependent Variable: BUSPER

Source: SPSS Output (2022)

The analysis from the study and the regression indicates that, the relationship between PSR and BUSPER of KEDCO, Barnawa Business Unit, Kaduna is significant and positive with a coefficient of 0.790 and a p-value of 0.000. A unit increase in PSR would result to increase to the BUSPER by a factor of 0.790 (79.0%). Thus, this suggests that the PSR has significantly positive impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna during the period of the study. Based on this, the study rejects the null hypothesis one (H_{01}) which states that PSR have no significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. As a result, the study deduces that PSR have significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna during the period of the study. The study found that PSR has a p-value of 0.000 and a coefficient value of 0.790 which is significant at 5%. This signifies that PSR has a positive effect on the BUSPER of

KEDCO, Barnawa Business Unit, Kaduna. It, therefore, implies that for every increase in PSR increases BUSPER by 79%. This finding is thus, in conformity with that of Jitaree (2015) which shows a significant relationship between PSR and BUSPER but in contrast to the study of Cavazotte and Chang (2016) which shows an insignificant relationship between PSR and BUSPER.

With a coefficient of 0.608 and a p-value of 0.008, the analysis from the study and the regression shows that the relationship between LSR and BUSPER of KEDCO, Barnawa Business Unit, Kaduna is significant and positive. This suggests that the LSR has had a significantly positive impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna during the period of the study. Based on this, the study rejects the null hypothesis one (H_{02}) which states that LSR have no significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. As a result, the study deduces that LSR have significant

impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna during the period of the study. The study found that LSR has a p-value of 0.008 and a coefficient value of 0.608 which is significant at 5%. This signifies that LSR has a positive impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. It, therefore, implies that for every increase in LSR increases BUSPER by 60.8%. This finding is however in conformity with that of Fernandez (2016) which shows a significant relationship between LSR and BUSPER but in contrast to the study of Boatright (2020) which shows an insignificant relationship between LSR and BUSPER.

The analysis of the study and the regression demonstrate a substantial and positive link between ECSR and BUSPER of KEDCO, Barnawa Business Unit, Kaduna, with a coefficient of 0.269 and a p-value of 0.010, respectively. This suggests that the ECSR had a favourable effect on the BUSPER of KEDCO, Barnawa Business Unit, increasing it by a factor of 0.269 (26.9%) for each unit rise. Based on this, the study rejects the null hypothesis one (H_{03}) which states that ECSR have no significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. As a result, the study deduces that ECSR have significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna during the period of the study.

The study found that ECSR has a p-value of 0.008 and a coefficient value of 0.269 which is significant at 5%. This signifies that ECSR has a positive impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. It therefore, implies that for every increase in ECSR, BUSPER increases by 26.9%. This finding is thus, in conformity with that of Mohr (2021) which showed a significant relationship between ECSR and BUSPER. However, the finding contrasts the study of Cavazotte and Chang (2016) which showed an insignificant relationship between ECSR and BUSPER.

With a coefficient of 0.633 and a p-value of 0.010, the analysis from the study and the regression shows that the relationship between ETSR and BUSPER of KEDCO, Barnawa Business Unit, Kaduna is significant and positive. This shows that throughout the research period, the ETSR had a considerably favourable influence on the BUSPER of KEDCO's Barnawa Business Unit in Kaduna. Based on this, the study rejects the null hypothesis one (H_{04}) which states that ETSR have no significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. As a result, the study confirms that ETSR have significant impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna during the period of the study. The study found that ETSR has a p-value of 0.008 and

a coefficient value of 0.269 which is significant at 5%. This signifies that ETSR has a positive impact on the BUSPER of KEDCO, Barnawa Business Unit, Kaduna. It therefore, implies that for every increase in ETSR, the BUSPER increases by 63.3%. This finding is thus, in conformity with that of Jitaree (2015) which showed a significant relationship between ETSR and BUSPER but in contrast to the study of Udayasankar (2018) which showed an insignificant relationship between ETSR and BUSPER.

Conclusion

The study intended to determine the impact that CSR has on business performance of KEDCO, Barnawa Business Unit, Kaduna. The study revealed that Philanthropic Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna, Legal Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna, Economic Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna and Ethical Social Responsibility has significant impact on business performance of KEDCO, Barnawa Business Unit, Kaduna.. Based on the findings, it can be implied that KEDCO, Barnawa Business Unit, Kaduna would directly derive significant improvement in business performance from investments in

CSR. When KEDCO invest in CSR such as building among others in the community they are operating, they will benefit from improved business performance in the long run. This study concludes that CSR helps to improve business performance of KEDCO, Barnawa Business Unit, Kaduna. It is, therefore, a noble practice for KEDCO, Barnawa Business Unit, Kaduna to engage in CSR as part of their operating activities and set aside funds annually towards a social course. CSR should therefore, be considered as part of daily operating activities for KEDCO, Barnawa Business Unit, Kaduna. To grow and realize its dreams, it has to engage itself morally and commit itself at improving the society's social and living standards.

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Effect of Risk Management on Profitability of Banks in Nigeria

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Abstract

This study assessed the effect of risk management on profitability of banks in Nigeria and suggested measures towards mitigating their effects on the banking sector in Nigeria taking a case of fourteen selected banks. The study covered a 13-year period from 2008 to 2020. The data for the study were obtained from secondary sources including the annual reports and financial statements of the selected banks and Central Bank of Nigeria (CBN) Statistical bulletin. The study used the Panel Data Regression model. The results revealed that loan loss provision was positive and significant, loan to deposit ratio was positive and insignificant, while both capital adequacy and non-performing loans were negatively insignificant to profitability. As such, commercial banks should embark upon upgrading their risk management strategies.

Keywords: Capital adequacy, Deposit to loan ratio, Loan loss provision, Non-performing loans, Profitability,

1. Introduction:

The major role of banks in any country is their ability to mobilize funds from surplus sectors to deficit ones, through lending activities. When the lending activity is followed by prompt repayment of principal and interest, motivation for further lending to existing and future customers is facilitated.

In an imperfect capital market like that of Nigeria, risk of default exists. Credit risk was identified by Basel, (2001) as the major risk affecting banks. This risk arises from poor evaluation and inadequate appraisal of credit requests of customers by banks credit officers, as well as deceit and undisclosed information by customers at the point of making request. The consequence of risk is

non-payment of principal and interest as and when due. This non-payment of loan granted after 90 days or more of maturity is known as non-performing loan, which is the greatest threat to banks' profitability and survival. (Kajola, Olabisi, Adedeji, & Babatolu, 2018). Non-performing loans hinder banks from attaining their set goals and lead to bankruptcy of such banks (Kolapo, Ayeni & Oke, 2012).

The nature of banking business contains an environment of high risk. So risky in the sense that it is the only business in which the proportion of borrowed funds is far higher than the owners' equity (Owojori, Akintoye & Adidu, 2011).

The banking business, in comparison to other types of human endeavor is

significantly exposed to risks. Banks no longer simply receive deposits and make loans; they also operate in a rapidly innovative sector with a lot of pressure mount for profit which urges them for continuous product or service development to cross-sell and up-sell to satisfy customer.

Banks management acknowledge the fact that mitigating the occurrence of the risk of non-performing loans is having a well-structured credit management strategies such as risk assessment and follow up mechanism (Pondel, 2012). In assessing financial system stability, loan-loss provisioning policy is critical; it is a key contributor for fluctuations in banks profitability and capital positions, which has a bearing on banks supply of credit to the economy.

Loan loss provision enable banks to recognize the estimated loss from a particular loan portfolio in their profit and loss account, even before the actual loss can be determined with accuracy and certainty as events unfolds.

The level of loan loss provision should be able to cover the whole spectrum of expected credit losses, if such provisions will serve as a true measure of credit risk. A well-established bank ought to have less loan loss provision and higher profitability. For assessing bank's liquidity, loan to deposit ratio is expressed as a percentage by

comparing the banks' total loans to their total deposit for the same period. If the ratio is high, it implies that the bank may not have enough liquidity to cover any unforeseen fund requirements. Conversely, if the ratio is low, it implies that the bank may not be earning as much as it should be earning. The ideal loan to deposit ratio is 80 to 90%. This implies that the bank reserves 10 to 20% for the risk of unexpected liquidity needs.

Liquidity management is critical for the success of commercial banks. Bordeleau and Graham (2010) maintained that liquidity was one of the main causes for the world financial crisis experienced in 2008.

Central bank of Nigeria guidelines on regulatory capital requirements for banks demand that they are required to maintain regulatory capital adequacy ratio of 15% with international authorization and systemically important banks (SIB), while a Capital adequacy ratio of 10% with National and Regional banks (Ofeimun & Akpotor, 2020).

Capital is a major asset of banks' strength and buffer to absorb unanticipated losses from bank operations, and in the event of problems, capital enables the bank to continue to operate in sound and viable manner (Igbinsosa & Aigbovo, 2016).

Olalekan and Adeyinka (2013) opined that the minimum ratio of capital to total risk-

weighted assets should remain at 10% as prescribed in circular BSD/11/2003 dated 4th August, 2003. The circular also stated that at least one half of a bank's capital should comprise paid-up capital and reserves, while every bank should maintain a ratio of not less than 1:10 between its adjusted capital and total credit net provisions. Consequently, banks in Nigeria are advised to maintain a higher level of capital that is commensurate with their risk profiles (Ofeimun & Akpotor, 2020).

Profitability is a key to measuring performance and stability of banks in Nigeria as profit is the key determinant of growth and employment in the medium term. Increase in profitability is a key contributor to economic progress, since profit has influence on investment and savings decisions of banks. Profit increases the cash flow position of companies and offers greater flexibility in the source of capital for investment.

Most of the banking studies have noticed that the capital ratio, loan loss provision, loan to deposit ratio, control over non-performing loans and expense control are important drivers of high profitability. (Kolapo, Ayeni & Oke, 2012)

In a study carried out by Ashby and Diacon (1998) and cited in Gerald and Mars (2000), it was discovered that the practice of risk

management in commerce stems largely from the need to avoid contractual, tortious or statutory liability which has the capacity to dent the image of the organization. The danger of capital misallocation and imprudent risk taking has become the leading source of problem in the banking industry; this has crippled many banks, thus, there is need to identify, measure, monitor and control all inherent risk in their day to day business transactions.

Statement of Problem

The first indigenous bank in Nigeria, African Banking Corporation that was established in 1982, failed the same year partly due to undercapitalization, that is inadequacy of capital to meet its obligations as and when due. Over the years Nigerian banks have experienced varying degrees of failures with subsequent harsh effects on the financial system and stability of the economy (Ofeimun & Akpotor, 2020).

The central bank of Nigeria (CBN) as the apex regulator of the banking sector increased the minimum capital base for commercial banks to N25 billion in 2005 during the consolidation exercise, due to the fact that most of the existing eighty-nine (89) banks before 2005 did not have the capacity to compete with their peers outside the country, among other reasons. Some of the 25 banks that emerged after the exercise

started to have one problem or the other. There were debacles in Spring Bank, Wema Bank, Afribank, Bank PHB, and later Skye Bank and Diamond bank started to have serious liquidity problems. On this basis, CBN stepped in and approved their acquisitions by other stronger banks. (Ofeimun & Akpotor, 2020).

Global economic crisis and structural lapses in Nigerian stock exchange with Nigerian banks having over 65% of stock market capitalization, collapsed, causing Nigerian banks' exposure to increase non-performing loans (Abiola & Olausi, 2014).

Economic challenges confronting Nigerian banks include declining deposits, increased non-performing loans, lower income of depositors, lack of investors' confidence in banks, falling oil prices, declining stock market, undercapitalization, rising unemployment among others (Atuche, 2009).

The banking institution has been plagued by several challenges as highlighted by the (Central Bank of Nigeria's code of corporate governance for banks in Nigeria, post consolidation, January 5, 2006). Such challenges include conflict of interest between boards and managements giving rise to board squabbles, ineffective board oversight functions, fraudulent and self-serving practices among members of the

board, managements and staff overbearing influence on chairman or MD/CEO especially in family-controlled banks. In addition, the CBN code of corporate governance for banks in 2006 (www.goggle.com) also emphasized that weak internal controls, non-compliance with laid-down internal controls and operation procedure, poor risk management practices resulting in large quantum of non – performing credits including insider -related credits, abuses in lending, and many others were the challenges faced by banks. These have led to the declining state of the industry (Central Bank of Nigeria's code of corporate governance for banks in Nigeria, post consolidation, January 5, 2006, section 2.5 (www.google.com)).

Therefore, the following mirage of problems facing Nigerian banks such as non-performing loans, inadequate capital to meet financial obligations as and when due, too high loan to deposits ratios resulting in banks giving out all deposit received as loans, inadequate provision for loan loss, negatively influence profitability of banks (Ofeimun & Akpotor, 2020; Abiola & Olausi, 2014; Atuche, 2009; CBN Corporate governance code, 2006; Kolapo, Ayeni & Oke, 2012; Bordeleau & Graham, 2010; Igbinosa & Aigbovo, 2016).

Based on these, this study investigates the effects of risk management on the profitability of banks in Nigeria by examining the effect of loan loss provision, deposit to loan ratio, capital adequacy and non-performing loan on banks profitability in Nigeria. These variables are justifiably used based on existing theoretical literature and empirical evidence from prior studies, such as Gabriel, Victor & Innocent (2019); Ozurumba (2016) and Ugoani, (2016) all of whom have tried to examine the adverse effect of non-performing loans on banks profitability in Nigeria, using only three commercial banks. Gizaw, Kebele & Salvaraj (2015) as well examined the impact of credit risk on profitability of eight commercial banks in Ethiopia using non-performing loan, loan- loss provision, loan to total deposit and capital adequacy as proxies for risk management and return on Asset (ROA) as proxy for profitability.

2.0: Literature Review:

2.1: Conceptual Review

2.1.1 Bank's Profitability

Bank's Profitability is very crucial to shareholders and investors in particular as well as the economy in general. Maximization of shareholders wealth and enhancing the value of the firms constitute significant objective of banks and this could be achieved through efficient use of bank's available resources such as human capital,

money, machines, entrepreneurial capabilities and skills, all of which need proper and continuous appraisal and evaluation, which is done systematically to determine the attainment of the bank's objectives (Amelia, 2002).

Return on assets is used as proxy for the dependent variable, profitability, because ROA is the most sustainable measure of efficiency and also suitable in revealing how efficiently and effectively available total assets of the bank can be utilized. Profitability facilitates the function of banks as the engine of financial development in a nation (Gizaw, Kebele & Salvaraj, 2015).

2.1.2 Risk Management.

Risk Management is the process of identifying and evaluating risks as well as selecting and managing techniques to adopt for risk exposures. It is the practice of adjusting exposures for the firm's position or portfolios. It tries to stabilize variability of returns while trimming large – dominant – net exposures as well. Risk management can also be used to secure more favorable financing for inventories or pricing of securities or commodities. According to Soludo (2005), approaches to risk have apparently changed across organizations and the whole globe. This involves the recognition by many business leaders that risks are no longer mere hazards to be

avoided but they are also in many cases and constitute opportunities to be embraced

2.2. Banking Risk Characteristics

Nwankwo (1990) explained that bank management is conterminous with risk management. That is to say that bank management is nothing other than managing risks. Bank management is always trying to reduce the level of risks associated with (i) credit (default leading to non-performing loans), (ii) liquidity (leading too high loan to deposit ratio), (iii) operations, (iv) market, (v) system and (vi) interest rate and foreign exchange. These six specific kinds of risk form the core risks associated with banking and are discussed below.

- (1) **Credit Risk** Credit risk arises whenever a lender is exposed to loss from borrower, who fails to honor their debt obligations, as they have contracted, leading to non-performing loan after 90 days of default.

According to Owojori, Akintoye & Adidu (2011), available statistics from liquidated banks clearly showed that inability to collect loans and advances extended to customers and creditors was a major contributor to the distress of liquidated banks in Nigeria. When this occurred, a number of banking licenses were revoked by the Central Bank of Nigeria (CBN).

Credit Risk Management

The objectives of credit risk management is to minimize the risk and maximize bank's risk adjusted rates of return by assuming and maintaining credit exposure within the acceptable parameters. This risk can be reduced with valuable collaterals collected by the bank officials from customers at the point of request and loan appraisal, post disbursement monitoring, limiting sect oral exposure, inserting covenants and risk-based pricing (Ngwu, 2006).

2.3 Risk Management and Bank Profitability

Risk management is a process that identifies loss exposure faced by an organization and selects the most appropriate techniques for treating such exposures.

2.4 Credit Risk Management and Bank's Profitability

The profit function of a bank includes the size and composition of its credit portfolio. Ordinarily, loans generate revenue through interest and increase bank profits; hence, a large credit portfolio ought to imply improved profitability. However, since substandard credits are a source of heavy financial losses to a bank and have actually been held responsible for numerous bank failures, it follows that a large credit portfolio could also result in reduced bank

profitability if it mainly comprises substandard credits.

2.5 Empirical review

Idowu and Awoyemi (2014) investigated the impact of credit risk management on the profitability of seven commercial banks in Nigeria for the period 2005-2011. A panel regression model was used as an estimation technique. The results revealed that non-performing loan (a measure of credit risk) has a negative and significant influence on the profitability of Nigerian deposit money banks.

Ozurumba (2014) examined the impact of non-performing loans on the performance of some selected commercial banks in Nigeria using secondary data for three banks from 2000 to 2013 as well as using multiple regression techniques for its analysis. Findings indicated that return on asset and return on equity have an inverse relationship with non-performing loan as well as with loan loss provision respectively.

Abiola & Olausi (2014) explored the impact of credit risk management on the profitability of banks in Nigeria from 2005 – 2011. The research used financial statements of the seven selected banks and employed panel regression model for analysis. Return on Asset (ROA) and return on equity were used as indicators for profitability, while capital adequacy ratio (CAR) and non-

performing loans (NPL) were used as indicators for credit risk management. Results indicated that credit risk management has strong influence on profitability of banks in Nigeria.

Gizaw, Kebele & Salvaraj (2015) investigated the impact of credit risk on the profitability of commercial banks in Ethiopia from 2003 – 2012 using eight commercial banks. The study used non-performing loan ratio, capital adequacy ratio, loan to deposit ratio and loan loss provision ratio as indicators for credit risk and return on Asset (ROA) and return on equity (ROE) as proxies for profitability. The results showed that credit risk measures, loan loss provision and capital adequacy ratio have significant influence on the profitability of banks in Ethiopia.

Imola (2012) examined financial risk analysis for commercial banks in Romania banking industry and found out liquidity risk such as loan to deposit ratio has a negative relation with profitability, measured by return on Assets (ROA).

Kassim (2009) examined credit risk and banks' performance in Egypt and Lebanon banks in the 1990s. He found that liquidity variable is insignificant across all banks and not related to profit.

3.0 Research Method

3.1 Research Design: This study adopted descriptive research design to collect the data from 2008 to 2020 about fourteen money deposit banks.

3.2 Population: The population of the study consists of 21 Deposit Money Banks listed on the Nigerian stock exchange as at 2020.

3.3 The Sample and Sampling Technique

Sampling Filtering – The sampling technique was purposive since the banks were included in the sample if they meet the criteria for selection. These criteria were based on:

- 1) the companies were quoted on the Nigerian Stock Exchange from 2008-2020,
- 2) there was access to their annual financial reports within the period, and
- 3) newly listed and delisted banks were excluded from the study. Therefore, only banks that had all the relevant data due to continuous existence were included.

4) The final sample size was arrived at based on the availability of relevant data for thirteen years for all the research variables. Only 14 banks that met the criteria were used as sample for this study.

This is based on the belief that the sample is a representative data and there is no basis to think that sample selection biases will affect the results arrived at.

3.4 Data Collection The study relied mainly on secondary data obtained from the annual reports of 14 Deposit Money Banks for a period of 13 years (2008-2020) and analyzed using panel regression model.

3.5. Variable Measurement and Model Specification:

The empirical frame work for the investigation of the link between credit risk management indicators and deposit money banks’ profitability based on existing empirical evidence from prior studies, is given as follows:

VARIABLES	NATURE	MEASUREMENT	SOURCE/S
Return on Asset (ROA)	Dependent Variable	Net Income/ Total Asset	Gizaw, Kebele & Salvaraj (2015)
Non-performing Loan Ratio	Independent Variable	Non-Performing loans/ Total Loans	Kargi, (2011); Kajola et al., 2018
Loan Loss Provision	Independent Variable	Loan Loss Provision/ Classified Assets	Kolapo, Ayeni, & Oke (2012)
Capital Adequacy Ratio	Independent Variable	Total equity/ Total Assets	Berger (1995)’ Ngo, (2006).
Loan to Deposit RATIO	Independent Variable	Total loans/Total deposits	Kargi, (2011); Kajola et al., 2018

Source: Author’s Compilation, 2022.

Model Specification

The model for the study is represented in the following regression equation:

$$ROA_{it} = \beta_0 + \beta_1LLP_{it} + \beta_2LTD_{it} + \beta_3CA_{it} + \beta_4NPL_{it} + u$$

Where:

ROA is a dependent variable which represents bank profitability; ROA is a better measure to determine the profitability of a company, as higher ROA means more asset efficiency. Some of the independent variables will vary over time and cross sections, whereas others will only vary across sections.

The Independent variables are:

LLP = Loan loss provision (Measurement and definition are as stated in above table)

LTD = Loan to total Deposit

CA = Capital Adequacy

NPL = Non performing loan

U = Error term

β_0 = is the intercept (constant term)

4.0: Presentation and Analysis Of Results

4.1: Introduction

We conducted fixed and random effect panel data regression, because the data collected have time and cross-sectional attributes and the Hausman test was also conducted to select between fixed and random effect models.

4.2.0 The Panel Data Regression Results

Panel Regression Analysis:

The econometric techniques adopted in this study were the panel fixed and Random effect regression. The rationale for their usage is based on the following justifications:

The data collected have time and cross-sectional attributes that gives room for studying risk management factors over time (time series) as well as across the sampled banks (cross-section).

Panel data analysis normally involved two main models, and these are: fixed effect and random effect. To compare between fixed effect and random effect, the Hausman test is used. In this study, the random effect was used in the analysis, because the Hausman result is not significant, as such, random effect results are preferable to fixed effect results. Thus, the null hypotheses are therefore accepted.

4.2.1 ROA Model

The Return on assets model (ROA) panel data regression results examined how the risk management indicators affect the profitability of banks' and their ability to generate statistically significant positive return on assets (ROA). The results obtained are presented in Table 1.

Table 1: ROA panel regression results

	Expected Sign	ROA (Fixed Effect)	ROA (Random Effect)
C		0.733045 (0.315995) [0.7527]	0.782864 (0.418793) [0.6761]
LLPA	-	0.849369 (15.53536) [0.000]	0.869129 (16.42591) [0.0000]
LTD	+	0.002839 0.016323 0.9870	0.081649 0.491276 0.6241
CA	+	-0.019941 (-0.586838) 0.5586	-0.020385 (-0.719640) 0.4731
NPLA	-	0.001482 0.032174 0.9744	-0.028121 (-0.696738) 0.4873
R-Squared		0.790713	0.700436
Adj-R-Squared		0.735749	0.687954
F-Statistic		14.38597 +0.0	56.1165 (0.00)
Hausman Test		-	5.33 (0.3774)
DW		2.982111	2.655467

Note: (1) Parentheses () are t-statistic while bracket [] are p-values

In testing the cause- effect relationship between the dependent and independent variables, the widely used panel data regression models (fixed effect and random effect panel data estimation technique) was estimated. The differences in these models are based on the assumption made about the explanatory variables and cross sectional error term.

As presented in Table 1 above, the results revealed difference in their coefficients magnitude signs but did not necessarily change the number of insignificant variables. In selecting from the two panel data models, the Hausman test was conducted and the result showed that we accept Ho (adopt random effect model and reject fixed effect model). 5.33 (0.3774), more than .05, not significant implied that random results are preferable. This means

that we should adopt the random effect panel regression results, since the chi-square probability is greater than 5%. In Table 1, it was observed that the random effect results showed that the R-squared and adjusted R-squared values were (0.790713) and (0.735748). This indicates that all the independent variables jointly explain about 79% of the systematic variations in the performance of return on assets (ROA) across the 14 quoted banks sampled in this study with over the 13 years period (2008-2020). This means that any model that includes the various risk management indicators may be appropriate in explaining bank profitability. The F-statistics (56.11650) and its p-value (0.0) show that the ROA panel random regression model generally significant at 1% and 5% levels. The Durbin-watson statistics (DW) of 2.65 also confirms the validity of the model and indicates the model is free from autocorrelation problems.

4.3 Hypothesis Testing and Discussion of Findings

4.3.1 Hypothesis One

Ho1: That there is no significant relationship between loan loss provision to total assets and bank profitability Following the above, it should be noted that random effect panel regression models provided the following results; loan loss provision to total assets (**LLPA**) based on the slope

coefficient (0.8691) have a positive impact on banks return on assets (ROA) a measure of profitability and was statistically significant at 5 percent, since the probability value of (0.000) is less than the significant level at 5%. This result rejects null hypothesis (Ho) which suggests that there is no significant relationship between loan loss provision to total assets and bank profitability and accept the alternative hypothesis H1 that there is positive and significant relationship between loan loss provision and deposit money banks' profitability. Therefore, we can conclude that loan loss provision to total assets has a positive and significant relationship with Nigeria banks profitability. This result agrees with the work of Gizaw, Kabele and Salvaraj (2015); Kajola et al., (2018) but contradicts the work of Kolapo, Ayeni and Oke (2012) and Ozuerumba, (2014) that reported an insignificant relationship between loan loss provision and banks' profitability. This result indicates that commercial banks with higher loan loss provision reserves will be able to give more loans and be able to contain losses that may result therefrom.

4.3.2 Hypothesis Two

Ho2: There is no relationship between loan to deposit ratio and profitability of banks in Nigeria

Loan to deposit ratio based on the slope coefficient 0.081649 has a positive and insignificant relationship with profitability since the probability value of 0.6241 (62.41%) is greater than 5 level of significance. This result accepts the null hypothesis (Ho), which suggests that there is no significant relationship between loan to deposit ratio and profitability of banks in Nigeria. Therefore, we can conclude that loan to deposit ratio has a positive and insignificant relationship with Nigeria deposit money banks' profitability.

This result agrees with the work of Imola (2012), and Kassim (2009) that reported insignificant relationship between loan to deposit ratio and banks' profitability but contradicts the work Gizaw, Kabele & Salvaraj (2015); and Kajola et al., (2018). This result indicates that commercial banks with lower loan to deposit ratio will be able to cover loan losses and withdrawals by its customers.

4.3.3 Hypothesis Three

Ho3: There is no relationship between capital adequacy and profitability of Banks in Nigeria

Capital adequacy based on the slope coefficient of -0.020385 has a negative and insignificant relationship with profitability since the probability value of 0.4731 (47.31%) is greater than 5% level of

significance. This result accepts null hypothesis (Ho), which suggests that there is no significant relationship between capital adequacy and profitability of banks in Nigeria.

This result contradicts the work of Abiola and Olausi (2014) and Gizaw, Kabele and Salvaraj (2015) that reported positive and significant relationship of capital adequacy with profitability of banks. However, this result is corroborated by the work of Ngo (2006) that found out no satisfying significant relationship between capital adequacy and banks profitability.

4.3.4 Hypothesis Four

Ho4: There is no relationship between non-performing loan ratio to total loan and profitability of Banks in Nigeria

Non-performing loans based on the slope coefficient- 0.028121 have a negative and insignificant relationship with profitability, since the probability value of 0.4873 (48.73%) is greater than 5% level of significance. This result accepts the null hypothesis (Ho) which suggests that there is no significant relationship between non-performing loan and profitability of banks in Nigeria. This result is in line with the works of Adebisi and Matthew (2015); Kolapo, et al. (2012) and Ozurumba, (2014) who reported that non-performing loans have no significant relationship with return on assets.

This simply means that the level of firms' assets was not affected by the level of non-performing loans. This result however, contradicts the works of Gizaw, Kabele and Salvaraj (2015); Kajola et al. (2018); and Idowu and Awoyemi, (2014) who reported negative and significant relationship between non-performing loan and profitability.

5.0 Conclusion and Recommendations

The general objective of the study was to establish the effect of risk management on the deposit money banks' profitability and its specific objectives were to examine the relationship between profitability and the loan loss provision, loan to deposit ratio, capital adequacy and non-performing loans in Nigeria,. The findings indicated that the sampled banks' loan loss provision has a positive and significant relationship with Nigeria banks' profitability, their loan to deposit ratio has insignificant relationship with profitability, their capital adequacy were negative and insignificant to profitability, they have non-performing loans that are insignificant and negatively correlated to profitability.

Commercial banks are thus, advised to universally embark upon an upgrading of their risk management and control systems by establishing sound and competent strategies. These methods would improve

risk management, increase capital for sustainable liquidity and provide sound training on risk management staff on new developments in risk management units which are run by best practices in risk management, such as the institution of a clear loan policy and the adherence to underwriting authority and limits. If given, such training will enable them to identify, measure, monitor and control all inherent risk in their day to day business transactions.

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Appendix

Method: Panel Least Squares

Date: 02/12/21 Time: 04:50

Sample: 2008 2020

Periods included: 13

Cross-sections included: 14

Total panel (balanced) observations: 182

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.733045	2.319796	0.315995	0.7527
LLPA	0.849369	0.054673	15.53536	0.0000
LTD	0.002839	0.173940	0.016323	0.9870
CA	-0.019941	0.033980	-0.586838	0.5586
NPLA	0.001482	0.046052	0.032174	0.9744

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-squared	0.790713	Mean dependent var	0.949206
Adjusted R-squared	0.735749	S.D. dependent var	4.061594
S.E. of regression	2.087876	Akaike info criterion	4.497581
Sum squared resid	431.5635	Schwarz criterion	5.105356
Log likelihood	-256.3476	Hannan-Quinn criter.	4.744501
F-statistic	14.38597	Durbin-Watson stat	2.982111
Prob(F-statistic)	0.000000		

Modelling the Link between Entrepreneurial Orientation, Learning Orientation and SMEs Performance: The Moderating Role of Technological Orientation

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Abstract

The primary goal of this study is to investigate the link between entrepreneurial orientation, learning orientation and SMEs performance, with a particular emphasis on the moderating role of technological orientation. The paper used cross-sectional survey design to collect data from the sample of 272 SMEs operating in Kaduna Metropolis. The preliminary analysis was conducted using SPSS and the hypothesis was analysed using PLS-SEM. The first finding indicates a positive but insignificant relationship between entrepreneurial orientation and the performance of SMEs. It further documents for the second finding that learning orientation is positively and significantly associated with SME performance. Furthermore, the third finding indicates that technological orientation is positive and significantly moderates the relationship between entrepreneurial orientation and the performance of SMEs. The fourth finding revealed that technological orientation is negative and moderates the relationship between learning orientation and SMEs performance significantly. Therefore, the study recommends that SMEs owners-managers, policy makers and regulatory agencies should encourage sound entrepreneurial orientation, learning orientation and technological orientation culture with a view to increase SMEs performance. Thus, the study is expected to benefit both management and owners of SMEs in the country by improving their understanding of how they can use and implement different strategies to achieve higher performance.

Keywords: Entrepreneurial Orientation, Learning Orientation, Technological Orientation, SMEs Performance

1. Introduction

The performance and contributions of Small and Medium Enterprise (SMEs) has become a major concern for academics and practitioners across the globe. This is because SMEs played an important role, ranging from poverty reduction to job

creation in many countries (Aminu & Shariff, 2016). The evolution of SMEs sector serve as an engine for poverty relief, job opportunities, improvement of local technology, output diversification and multiplication of potential entrepreneurs (Ajayi, Ojelade, Adedokun & Oladeji, 2017;

Joel, Tarus, Kibet & Kimitei, 2015; Eniola, Anthony & Abiodun, 2014).

In a developing economy like China, SMEs account for 90% of all businesses, more than 50% of tax revenue, more than 80% of urban employment, and 60% of Chinese GDP (Chinese National Bureau of Statistics, 2017). Similarly, the South African Ministry of Trade and Industry (2017) reported that SMEs accounts for 91% of formal businesses, 60% of employment, and 52% to 57% of South African GDP. According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2017) and the National Bureau of Statistics (NBS) (2017), SMEs account for approximately 39.5% of total employment and 8.89% of GDP in Nigeria. In comparison to the developing countries mentioned, this indicated a poor performance and contribution of SMEs in Nigeria.

Similarly, the history of poor performance of SMEs made Nigerian government to come up with various initiatives and programmes. For example, the creation of Nigerian Industrial Development Bank (NIDB) in 1964; Small Industrial Credit Scheme (SSICS) in 1971; People's Bank of Nigeria (PBN) in 1989; National Economy Empowerment and Development Strategy (NEEDS) in 2003; SMEDAN in 2003;

Microfinance Institution (MFIs) in 2005; Development Bank of Nigeria (DBN) in 2014; Government Enterprise and Empowerment Programme (GEEP) in 2016; Agric-Business Small and Medium Enterprise Investment Scheme (AGSMEIS) in 2017 and the most recent is Micro Small and Medium Enterprises Survival Fund (MSMESF) in 2020, which was designed specifically to solve the problems of poor SMEs performance in Nigeria.

However, researchers have suggested several factors from a variety of theoretical perspectives to understand the underlying causes of poor SMEs performance. These include entrepreneurial orientation (EO) (Oktavio, Thomas, & Endo, 2019; Aminu, 2016), market orientation (MO) (Lee, Kim, Seo, & High, 2015; Kholi & Jaworski, 2012), learning orientation (LO) (Sandeep & Rayees, 2015), and innovation orientation (IO) (Chung, Animesh, Han, & Pinsonneault, 2019; Lai, Yusof, & Kamal, 2016). Despite the growing body of evidence linking EO, LO, and SMEs' performance, little is known about how TO interact with EO and LO to improve SMEs' performance. To bridge that gap, this paper proposed a model to determine whether TO have a moderating effect on the relationship between EO, LO and SMEs performance. Therefore, this research is the first to use TO

to moderate EO, LO and SMEs FP relationship

The paper is organized as follows: reviews of the literature, including EO and SMEs FP, LO and SMEs FP, and how TO plays a moderating role in the relationship between EO, LO, and SMEs FP; research framework for the study; methodology, result and discussion and finally, limitations and suggestions for future research.

2. Literature Review

2.1 Entrepreneurial Orientation and SMEs Performance

EO is defined as the processes, practices, and decision-making activities that lead to new entry (Lumpkin & Dess, 1996). It is the sum of a firm's innovativeness, proactiveness, and risk-taking (Miller, 1983). These dimensions have been widely used in previous studies (Moreno & Casillas 2008; Covin & Slevin 1989). Lumpkin and Dess (1996) later added two dimensions; competitive aggressiveness and autonomy. This implies that EO has five dimensions; innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy (Lumpkin & Dess, 1996; Miller, 1983). Therefore, Covin and Slevin (1989), viewed EO as a one-dimensional. Lumpkin and Dess (1996), on the other hand, believe that EO is a multidimensional construct because

several dimensions of it occur in different combinations.

Previous research on the relationship between EO and SMEs FP has yielded mixed results. Aminu (2016), for example, looked at how innovation, risk-taking, and proactiveness affect the financial performance of 125 small businesses in Kano State, Nigeria. The findings show that each of the EO dimensions (innovativeness, proactivity, and risk-taking) has a significant impact on simple firms' financial performance. Similarly, Shaher and Ali (2020), discovered the mediating effect of LO on the relationship between EO and innovation performance of Kuwait SMEs. The study used stratified random sampling method to select 221 participants (owners and CEOs of SMEs in Kuwait). Results of the analysis show that LO played a partial mediating role in the association of EO with innovation performance. Hence, this study takes into cognisance LO as mediating variable and suggested the need for future research to consider TO as moderating variable and thus it leaves a huge gap which will be addressed by the present study.

On the contrary, Sorayah et al. (2017), used PLS-SEM to explore the relationship between EO dimensions (proactiveness, innovativeness, risk taking) on business performance of one hundred and twenty

eight women entrepreneurs. The results show that only risk-taking has significant relation to performance women business, while innovativeness and proactiveness did not. In addition, Olubiyi, Egwakhe, Amos, and Ajayi (2019) used a multistage sampling technique to select 460 SMEs in Lagos State, Nigeria, from the manufacturing, agricultural, service, and real estate sectors. Descriptive and inferential statistics were used to analyze the data. The findings revealed that proactiveness and taking risks had a significant positive impact on SMEs' profitability in Lagos State. Competitive aggressiveness, on the other hand, had a negative but significant effect on SMEs' profitability, whereas autonomy and innovativeness had no effect. Hence, it can be seen that majority of the previous studies reported mixed findings and thus suggest the need for replicating the study. In this regard, the study advanced the following hypothesis:

Hypothesis 1: Entrepreneurial orientation is significantly related to SMEs performance.

2.2 Learning Orientation and SMEs Performance

According to Farrell et al. (2008), LO refers to the organizational philosophy or values that create knowledge and use that knowledge to improve performance through activities such as commitment to learning,

open-mindedness, and sharing vision. It is the acquisition of knowledge or insights that has the potential to influence behavior. Previous research (Sinkula et al., 1997) proposed that LO has three important interconnected dimensions: commitment to learning, open-mindedness, and shared vision. As a result, any SME with high levels of LO in their operations can achieve superior performance (Cheng & Sheu, 2017).

Previous empirical studies found mixed results in the link between LO and SMEs FP. For example, Maria Del, Javier, and Joaquin (2016) investigated the impact of LO on the performance of SMEs in México. They used a sample of 335 small businesses to determine how much LO affects performance. The findings indicate that the LO has a positive and significant impact on the performance of SMEs. In addition, Sandeep and Rayees (2015) looked at how company size influences the relationship between LO and company performance in their research. In Punjab, India, they used 278 manufacturing companies. According to the findings, LO has a positive impact on a company's financial performance. According to the findings, the relationship between LO and company performance is significantly moderated by the size of the company (based on investment).

On the contrary, Justin, Simon, Nadine, and Linda (2016) investigated the impact of LO on SMEs in Cape Town, South Africa. PLS-SEM was used to examine a survey of 122 businesses. According to the study's findings, LO has a positive but insignificant influence on organizational performance. From the perspective of dynamic capabilities, Samson et al. (2019) investigated the relationship between the availability of external financing on the LO and the performance of SMEs in Nasarawa State, Nigeria. According to the findings, LO is related to firm performance in a positive but insignificant way. Furthermore, the findings show that the presence of external financial resources strengthens the relationship between the LO and the FP. Thus, it can be seen that most of the previous studies reported mixed findings and thus suggest the need for replicating the study in another context. In view of this, the study advanced the following hypothesis,

Hypothesis 2: Learning orientation is significantly related to SMEs performance.

2.3 Technological Orientation as a Moderator

As mentioned in the previous section, previous studies that examined the relationship between EO, LO, and SMEs FP has yielded mixed results. These

discrepancies suggest that moderator variables are needed to strengthen the EO, LO, and SMEs FP relationships. As a result, the study propose TO as a moderating variable worth including in our model. Therefore, TO denotes the firm's ability to apply its technical expertise to create a new technical solution that meets the market's needs and desires (Spanjol, Qualls & Rosa, 2011). Several studies have looked into the impact of TO on SMEs' performance. The influence of TO on FP among 266 SME's in North-western Nigeria was investigated by Naala, Nordin, and Omar (2017). TO has a significant positive relationship with SME's FP, according to the findings. A significant relationship between TO and innovation superiority and firm performance has been confirmed by Gatignon and Xuereb (1997).

While existing research (Voss & Voss, 2000) found no significant effect of TO on a firm's subjective and objective performance, none of the studies have looked into the role of TO in the relationship between EO, LO, and SMEs' performance. This study believe when SMEs have EO and LO, they also need TO in order to perform at higher level. Thus, relationship between EO, LO, TO, and SMEs FP is theoretically based on Barney's (1991) RBV theory. According to the RBV, a firm's ability to use the available bundle of valuable intangible and tangible resources is the basis for competitive advantage (Barney,

1991; Rumelt, 1984). As a result, EO, LO, and TO are all valuable resources that assists businesses in outperforming their competitors and achieving higher levels of performance. In the light of the aforementioned theoretical and empirical contributions, the following hypotheses are advanced:

Hypothesis 3: Technonological orientation does not moderate the relationship between

entrepreneurial orientation and SMEs performance.

Hypothesis 4: Technonological orientation does not moderate the relationship between Lerner orientation and SMEs performance.

Based on extant research and resource base view theory, a conceptual model (Figure 1) has been developed. The conceptual model depicts the moderating role of TO in affecting EO, LO and SMEs FP relationships.

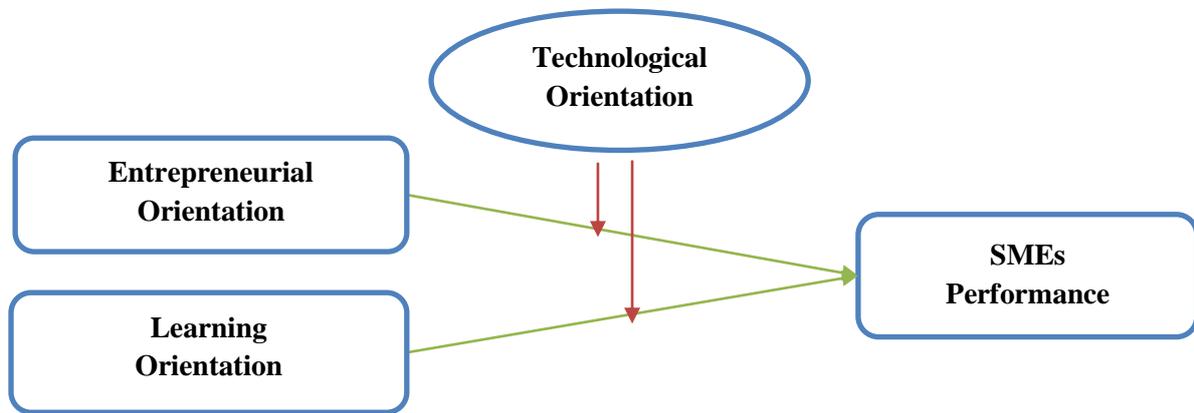


Figure 1: *Conceptual Framework*

3. Methodology

3.1 Participants and Procedures

Data were collected from 272 SMEs in Kaduna Metropolis. These SMEs' owners/managers were given self-reported questionnaires. Before administering the survey, the participants were first informed about the purpose of the research and that their participation in the current study was entirely voluntary. In all, 228 questionnaires were returned, and out of these returned, 212 questionnaires were found usable for

analysis. In this regards, Sekaran (2003), stated that for a cross-sectional study, a rate of 30% could be accepted. Thus, the present study has 212 questionnaires representing 78% which is sufficient for analysis.

3.2 Measurement of Variables

The present study has four variables to be measured using 5-Point Likert scale with an option ranging from '1' Strongly Agree (SA) to '5' Strongly Disagree (SD). These variables are EO, LO, TO and SMEs FP.

Specifically, SMEs FP was measured by six (6) items adapted from the study of Sulyanto and Rahab (2012). EO was measured by nine (9) items adopted from Covin and Slevin (1989). LO was measured by eleven (11) items adopted from Sinkula

et al. (1997). Lastly, TO was measured by ten (10) items adapted from Gatignon and Xuereb (1995). Therefore, table 1 present the summary of the variables measurement of the study.

Table 1: Variables Measurement

Variables	Items	Source
EO	9	Covin and Slevin (1989)
LO	11	Sinkula et al. (1997)
TO	10	Gatignon and Xuereb (1995)
FP	6	Sulyanto and Rahab (2012)

Note: EO = Entrepreneurial Orientation, LO = Learning Orientation,

TO = Technological Orientation, FP = Performance,

3.3 Technique of Data Analysis

This study used PLS path modeling with SmartPLS 3.0 software (Ringle, Ringle, & Sarstedt, 2015) to test the hypotheses and examine the complex relationships involving the moderating role of the TO. This is due to the fact that the PLS technique has many features and is widely used in empirical research in both management and entrepreneurship (Gorondutse & Hilman, 2016; Arrègle, Cabantous, Clegg, Germain, Mignonac, Monin, & Shibib, 2012). In essence, PLS path modeling was used for a variety of reasons. First, PLS path modeling is better suited for studies involving a large number of exogenous constructs explaining a small number of endogenous constructs (Hair et al., 2017; Chin, 2010). Second, because it bootstraps the study sample, PLS

path modeling can account for measurement error and deal well with non-normal data (Chin, 1998). Third, PLS path modeling assumptions are flexible in developing and validating complex models, with the advantage of estimating large models of moderation and mediation analysis (Albahussin & El-garaihy, 2013). Finally, PLS path modeling is becoming a more valuable method for latent variable path analysis with both reflective and formative measures (Allard, Henseler, Ildikó, & Zuzana, 2016; Fornell & Bookstein, 1982). As such, PLS-SEM is deemed appropriate. Following Henseler, Ringle, and Sinkovics (2009), we used two-step to assess PLS path modelling;

- i. Assessment of Measurement Model
- ii. Assessment of Structural Model

4. Results and Discussion

4.1 Measurement Model

According to Hair, Hult, Ringle, Sartedt, Danks, and Ray (2021), assessing the measurement model begins with assessing the indicator and internal consistency reliabilities, followed by convergent and discriminant validity for the reflective construct.

Indicator Reliability: The indicator reliability should be evaluated by examining the outer loadings of each construct (Hair et al., 2021; Duarte & Raposo, 2010). According to Hair, Hult, Ringle and Sarstedt (2017), indicator outer loadings should be greater than 0.70, and outer loadings between 0.40 and 0.70 should be acceptable for deletion only if it increases composite reliability (CR) and average variance extracted (AVE). As a result, the outer loadings for each of the reflective constructs in this study successfully met the indicator reliability criterion (See table 2 and figure 2).

Internal Consistency Reliability: The internal consistency reliability demonstrates the consistency of the indicators in measuring the construct (Hair et al., 2017). The researchers established a threshold of 0.7 or higher for interpreting composite reliability (Hair et al., 2017; Bagozzi & Yi, 1988). As shown in table 2, the composite reliability coefficients range between 0.838 and 0.903, indicating that the internal consistency reliability of this study was met.

Convergent Validity: Convergent validity is the degree to which a measure correlates positively with alternative measures of the same construct (Hair et al., 2017). Chin (1998) recommends that the AVE of each reflective construct be at least 0.50. In this study, EO has an AVE value of 0.513, TO has a value of 0.523, and SMEs FP has a value of 0.609 (See table 2). These values indicate that all of the study constructs have convergent validity and, as a result, explain more than half of the variance in their respective indicators.

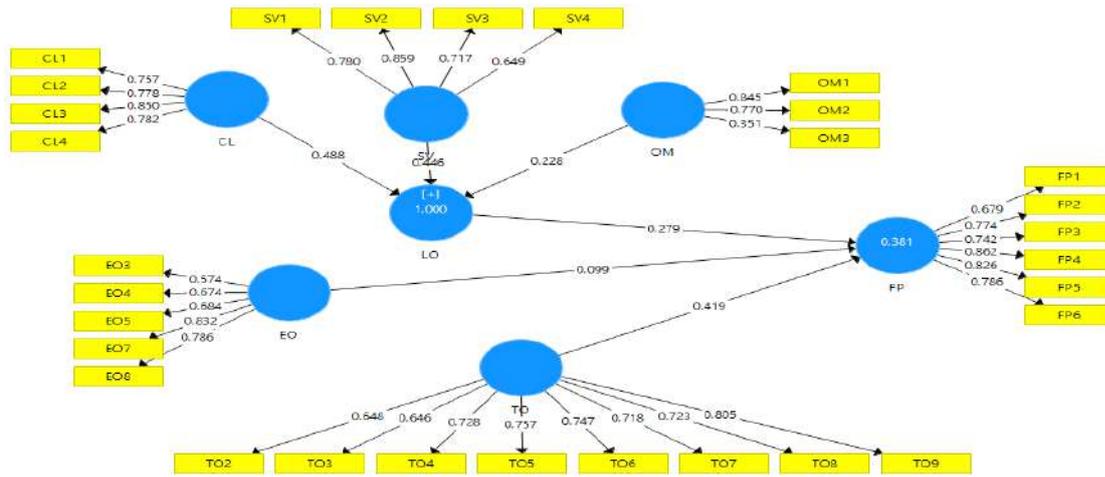


Figure 2: Measurement Model including Two-stage Approach

Table 2: Measurement Model: Reliability and Convergent Validity (n=212)

Constructs	Item	Loading	AVE	CR
EO	EO_3	0.574	0.513	0.838
	EO_4	0.674		
	EO_5	0.684		
	EO_7	0.832		
	EO_8	0.786		
T O	TO_2	0.648	0.523	0.897
	TO_3	0.646		
	TO_4	0.728		
	TO_5	0.757		
	TO_6	0.747		
	TO_7	0.718		
	TO_8	0.723		
	TO_9	0.805		
	SME FP	FP_1		
FP_2		0.774		
FP_3		0.742		
FP_4		0.862		
FP_5		0.826		
FP_6		0.786		

Note: EO = Entrepreneurial Orientation, TO = Technological Orientation, FP = Performance,

AVE = Average Variance Extracted and CR = Composite Reliability

Discriminant Validity: Discriminant validity is simply the degree to which a construct differs from other constructs (Duarte & Raposo, 2010). As a result, the discriminant validity was evaluated using the Heterotrait-Monotrait Ratio (HTMT) proposed by Henseler et al (2015). They also recommended that the HTMT value be 0.85 or 0.9. Table 3 showed that all of the reflective constructs met the HTMT criteria.

Table 3: *Discriminant Validity (HTMT) (n=212)*

Constructs	EO	FP	TO
EO			
FP	0.276		
TO	0.228	0.597	

Note: EO=Entrepreneurial Orientation, FP=Performance, TO=Technological Orientation

Furthermore, the formative constructs (LO) were evaluated based on tolerance level (TOL) or variance inflated factor (VIF), outer weights, outer loadings, and t-values. As shown in table 4, the VIF values of all indicators (i.e., lower order component) of the formative construct (LO) are less than the threshold of 5. It demonstrates that there is no collinearity between indicators because the VIF values ranged from 1.543 to 2.147. The outer weights values of the formative indicators CL, OM, and SV, on the other hand, provide sufficient evidence of the relative contributions to the key construct.

Similarly, the outer loadings of formative indicators show the absolute contribution to the construct because their values exceed the 0.50 threshold. As a result, all three indicators are crucial (both absolutely and relative) to the main construct (Hair et al., 2017). Although CL has a negligible outer weight, its absolute contribution is significant. Hair et al. (2017) proposed that when a construct's outer weight is non-significant but its outer loading is high, the construct should be retained and interpreted as absolutely important but not relatively important.

Table 4: *Formative Measurement Model (n=212)*

Formative Construct	Formative Indicators	VIF	Outer Weights	Outer Loadings	T Statistics
LO	CL	1.822	0.379	0.842	1.922
	OM	1.543	0.342	0.786	2.291
	SV	2.147	0.455	0.906	1.990

Note: LO = Learning Orientation, CL=Commitment to learning, SV=Share Vision, OM=Open-mindedness

Researchers (Henseler, Dijkstra, Sarstedt, Ringle, Diamantopoulos, Straub, & Calantone, 2014) proposed using standard root mean square (SRMR) and Normed Fit Index (NFI) to measure GoF in PLS models. According to Hu and Bentler (1999), the

SRMR value should be 0.080, and according to Bentler and Bonett (1980), the NFI values should be between 0 and 1, with the closer the NFI to 1, the better the fit. According to Table 5, the SRMR coefficient is 0.039, which is less than the acceptable threshold

of 0.080 recommended by Hu and Bentler (1999). Similarly, the value for NFI is 0.955, which is better according to Bentler and Bonett's recommendation (1980). This

meant that the model used in this study fit the data set using both the SRMR and the NFI criterion.

Table 5: *Model fit Using SRMR and NFI*

Criterion	Saturated Model	Estimated Model
SRMR	0.039	0.039
d_ULS	0.032	0.032
d_G	0.017	0.017
Chi-Square	18.349	18.365
NFI	0.955	0.955

4.2 Structural Model

The structural model will be used to test the hypothesis. According to Hair et al. (2021), there are four key criteria for evaluating the structural model in PLS-SEM. These include evaluations of: (1) path coefficient significance, (2) coefficient of determination (R^2), (3) effect size (f^2), and (4) predictive relevance (Q^2).

The first step in evaluating a structural model is to determine the significance of the path coefficients. In order to assess the significance of the path coefficients, this

study used the standard bootstrapping procedure with 5,000 bootstrap samples and 212 sample data (Hair et al., 2017; Sarstedt et al., 2014). The bootstrapping result in Table 6 shows a significant moderation relationship with SME FP when EO and TO are associated at the 5% significance level ($B = 0.125, t = 2.556, p = 0.011$). When LO and TO interact, a negative and significant moderation relationship is found on SME FP ($B = -0.114, t = 2.188 \& p = 0.029$). This provides empirical evidence for rejecting hypothesis ($H0^3$) as well as hypothesis ($H0^4$).

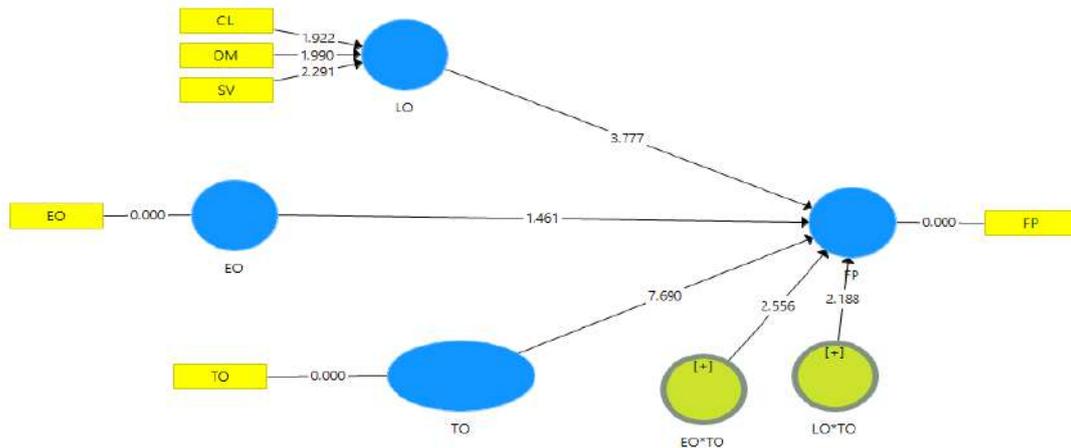


Figure 3: Bootstrapping for Direct and Moderation

Table 6: Path Coefficient for Direct and Moderation Relationships

Constructs	'Beta'	'Std. Dev.'	'T Statistics'	'P Values'	Decision
EO -> FP	0.089	0.061	1.461	0.144	Fail to Reject
EO*TO -> FP	0.125	0.048	2.556	0.011	Reject
LO -> FP	0.275	0.071	3.777	0.000	Reject
LO*TO -> FP	-0.114	0.054	2.188	0.029	Reject

Note: EO = Entrepreneurial Orientation, LO = Learning Orientation, TO = Technological Orientation and FP = Performance

The coefficient of determination (R^2) of endogenous constructs is the second structural model evaluation (Hair et al., 2017). According to Chin (1998), R^2 values of 0.67, 0.33, and 0.19 for endogenous latent constructs are significant, moderate, and weak, respectively. As shown in table 7, the exogenous constructs of this study (EO &

LO) and the moderator (TO) explain 38.1% of the total variance in SME FP. As a result, according to Chin's (1998) recommendations, the R-squared value (R^2) value explained by these exogenous constructs and the moderator on the target endogenous construct (SME FP) is moderate.

Table 7: Coefficient of Determination (R^2) for direct and Moderation Relationships

Construct	R-Square (R^2)
SMEs Performance	0.381 (38.1%)

The third second assessment of structural model is the effect size. According to Hair et

al. (2014), the effect size can be determined through the following formula:

$$Effect\ Size\ (f^2) = \frac{R^2\ Included - R^2\ Excluded}{Effect\ Size\ (f^2)}$$

Where:

f^2 = F-square value that determines the effect size of a specific exogenous on the endogenous,

$R^2_{Included}$ = R^2 value of the endogenous variable before omitting a particular exogenous construct and $R^2_{Excluded}$ = The changes in the R^2 value of the endogenous variable after excluding a particular exogenous variable from a model.

According to the above formula, f^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively (Cohen, 1988). According to Cohen's (1988) proposition, the effect size for EO (0.010)

on endogenous construct (SME FP) is none. This means that EO has no effect on SME FP. On the other hand, the interaction EO*TO (0.031) has a minor effect on the endogenous construct (SME FP). Similarly, the effect size for LO (0.088) on endogenous construct (i.e., SME FP) has a small effect on endogenous construct (SME FP). In contrast, the interaction between LO*TO (0.023) was found to have a minor effect on endogenous construct (SME FP). Furthermore, the effect size for TO (0.266) is classified as medium on endogenous construct (SME FP). As a result, the effect of all exogenous constructs on the endogenous construct can be classified as small, medium, or none.

Table 8: *Effect Size for Direct and Moderation Relationships: F-Square*

Constructs	F ²	Effect Size
EO	0.010	None
EO*TO	0.031	Small
LO	0.088	Small
LO*TO	0.023	Small
TO	0.266	Medium

Note: EO = Entrepreneurial Orientation, LO = Learning Orientation and TO = Technological Orientation

The final structural model evaluation is to determine the predictive relevance of the research model. This study employed the cross-validated redundancy measure (Q^2) to assess the predictive relevance of the model, as recommended by Hairs et al. (2021) and

Chin (1988). Furthermore, Henseler et al. (2009) stated that a research model with a Q^2 greater than zero is considered to have predictive relevance. As shown in table 9, the Q^2 value for the endogenous latent construct cross-validation redundancy test is

greater than zero (0.340), confirming the model's predictive relevance (Hair et al., 2021; Hayes, 2009; Chin, 1998).

Table 9: Predictive Relevance for Moderation Relationships: Q-Square

Total	SSO	SSE	1-SSE/SSO
SME Performance	212.000	140.010	0.340

Note: SSO=Sum of squared observation and SSE=Sum of squared prediction errors

4.3 Assessment of the Importance-Performance Matrix Analysis (IPMA)

The IPMA is a special way of expanding the results of the basic PLS-SEM by adding another dimension to the analysis, namely the actual importance and performance of each exogenous construct in explaining the target endogenous construct (Hair, et al, 2017; Höck, Ringle, & Sarstedt, 2010; Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Slack, 1994; Martilla & James, 1977). As a result, IPMA compares the overall effects (importance) of the structural model to the average value of the latent variable scores (performance. The goal is to identify antecedents with relatively high importance for the target construct (i.e., those with a

strong total effect) but also relatively low performance (i.e., low average latent variable scores) to highlight important areas of improvement that can receive high attention from the owner-manager to boost SME performance. As shown in Table 10, TO have a higher importance with a value of 0.433 representing 43% for the target construct (SME FP), but a moderate performance with a value of 56.126. Similarly, LO have an average importance of 0.317, representing 31% of the target construct (SME FP), but perform poorly. Finally, EO has a low importance with a value of 0.089 representing 8% for the target construct (SME FP), but higher performance.

Table 10: Importance-Performance Matrix Analysis (IPMA)

Constructs	Importance	Performances
EO	0.089	59.991
LO	0.317	51.505
TO	0.433	56.126

Note: EO = Entrepreneurial Orientation, LO = Learning Orientation and TO = Technological Orientation

5. Discussion of findings

The primary goal of this study is to investigate the moderating role of TO in the relationship between EO, LO, and SME FP. As a result, the study contribute to the literature by providing additional insight into how TO interacts with EO and LO to influence FP. According to the findings of this study, EO has a positive but insignificant effect on FP. This finding is consistent with previous research (e.g., Innocent et al., 2018; Hoque, 2018; Arisi-Nwugballa, Elom, & Onyeizugbe, 2016; Kumarpeli, & Semasinghe, 2015), which found that EO has a positive and insignificant influence on SME FP.

On the other hand, the interaction between EO and TO was discovered to be positively and significantly related to SMEs FP. The findings are also consistent with previous research (e.g., Oktavio et al., 2019; Naala et al., 2017; Aminu, 2016), which established that EO and TO have a positive and significant effect on SME FP.

Furthermore, LO was found to have a positive and significant effect on SME FP. The finding is consistent with previous research (e.g., Radwan et al., 2017; Evelyn & Olawale, 2017; Aminu & Shariff, 2015; Sandeep & Rayees, 2015), which indicates that LO is positively related to SME FP.

While the interaction between LO and TO has a negative and significant impact on SME FP. The finding implies that when SME owner-managers combine LO in terms of CL, OM, SV, and TO strategy, their performance suffers. This may occur at the SME level, particularly when owners-managers perceive new technology to be good and useful in their business operations, but it is either out of their reach due to the cost implications or the complexity of the technology, there should be a tendency for such technology to negatively affect their performance.

5.1 Theoretical, Methodological and Practical Implications

From a theoretical standpoint, only a few previous empirical studies have investigated the direct relationship between TO and SME FP (Naala et al., 2017; Amirkhani & Reza, 2015; Al-Ansari, Altalib, & Sardoh, 2013; Zhou & Li 2010), and little or no study has been found in the available literature that has investigated how TO interact with the present study IVs and DV. Thus, the current study empirically addresses this theoretical gap by expanding our understanding of how TO interacts with EO and LO to influence SME FP. This is also supported and explained by theoretical argument of RVB theory.

From a methodological standpoint, this study used first-order and HCM using PLS-SEM with the help of Smart PLS Version 3.0 software to examine LO (CL, OM, & SV) using the second stage approach as the reflective-formative HCM. As a result, the research successfully reduced the complexity associated with the LO construct thereby achieving parsimony. This enables the theoretical contribution to be expanded by developing and validating a formative LO construct.

From a practical standpoint, the findings of this study is expected to benefit both management and owners of SMEs by improving their understanding of how they can use and implement different strategies to achieve sustainable performance of SMEs in Nigeria. The study's findings will also be used by the CBN, SMEDAN, NBS, and MFIs to develop policies that will improve the performance of SMEs in Nigeria.

5.2 Limitations and Suggestions for Future Study

This study has several limitations that should be addressed in future research. To begin, one of the limitations of this study is in the area of design, which employs a cross-sectional design that captures only responses of data collected over a single period using SME in Kaduna Metropolis. As a result, future research may address this

constraint by conducting longitudinal studies that collect data over two or more time periods. Second, the study is limited to SME from all sectors that are registered with KADCCIMA and operating in Kaduna Metropolis, so the findings cannot be generalized to all SME in the state. As a result, the study suggests that future research be conducted on SME in the state that are both registered with SMEDAN and the Corporate Affairs Commission (CAC). Finally, in Kaduna Metropolis, TO was used to moderate the relationship between IVs and DV (EO, LO, and SME FP). As a result, the study suggests that future researchers who are interested in this area include measurement of other independent variables such as market orientation and innovation orientation against SME FP. It also suggests identifying other potential dependent variables, such as SME sustainability, to investigate the effect of the aforementioned IVs on SME sustainability in developing countries.

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Integration Challenges of Expatriates in the Nigerian Oil and Gas Sector

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Abstract

In the oil and gas sector, expatriates play an essential role because of their numerous advantages in creating knowledge. The discovery of oil in Nigeria created an opportunity for domestic and international investors to establish subsidiaries and partake in importing and exporting crude oil. However, these expatriates suffer conflict in performance optimization due to internal and external differences. Hence, this study examined the integration challenges peculiar to expatriates in the Nigerian oil and gas industry to stimulate optimization and consequently, national development. This research hoped to reveal the integration challenges of expatriates in the oil and gas sector. In order to achieve the research objective, a survey design was used to confirm the reliability of the qualitative instrument (Questionnaire) via a pilot test. This study used a blend of qualitative and quantitative approaches known as the mixed method. In addition, the secondary research was used to produce a research report theoretically informed by several related works of literature, particularly in the areas of expatriates' integration and work adjustment theory. After the data collection, the statistical package for social science and the correlation analysis was used to examine the strength and relationships among the different constructs. From the result obtained, the study found a clear cultural difference between Nigerian culture and the expatriates in terms of language, educational system, food and dressing. While gender was dismissed as a factor, expatriates affirmed that climatic conditions in Nigeria contributed positively to their performance. The discovered results were compared with previous research findings to validate the established data's authenticity.

1. Introduction

Petroleum products are being used in a wide variety of everyday items, from PPE to plastics, to chemicals, to fertilizers, to aspirin, to clothing, to car fuel, to solar panels and to making fuel, one of the most valuable commodities in the world that accounts for about 3% of GDP. When considering its importance and necessity to both the North and the South, it is clear that oil is a substance that may unite these two regions. Oil is integral to the development of

western civilization and the technological progress of the various western nations. According to Hamid (2012), the discovery of oil in Nigeria on the 12th of June, 1956 was followed by the entrance of multinational companies into Nigeria; their entrance also resulted in the number of foreigners coming into Nigeria to work. Among these foreigners were workers being sent on international assignments by their respective home-based organizations. In Egunjobi's (2013) opinion, the need for

these expatriates came as a result of the increment of the activities of these companies into foreign countries, including Nigeria, due to the establishment of subsidiaries. These expatriates are means of knowledge transfer in their organizations as they facilitate in improving the performance of subsidiaries through the distribution of their work experience and knowledge in overseas subsidiaries where such knowledge is lacking (Heirmac, 2015). Therefore, expatriates are integral part of multinationals in the oil and gas industry; they are indispensable in this sector owing to the numerous roles they play in imparting Knowledge and representing their home offices (Obioma, 2012).

However, Heirmac (2015) worried that expatriates have traditionally been posted into challenging geographical domains, such as climatically harsh, diseases prevalent, insecure, and dangerous places, in search of mineral wealth. They face difficulties in communication, climatic change and cultural difference in both short-term and long-term assignments (Akinwale, 2012). Some of the difficulties expatriates experience can be attributed to gaps in the home and host country support systems of the employee. Some overseas assignments fail because the company sending them made a bad hire; in these circumstances, the assignments would have failed regardless of

who they sent (Taghizadeh-Hesary et al., 2016). No amount of assistance from the company can guarantee success for an expatriate employee if they lack the qualities necessary to flourish in the new setting. Inadequate training for expatriates is also another issue. If an employee is not well prepared for life abroad, there is a far higher chance that they will fail. Preparing an expatriate for their function and mission should not be rushed, and should involve cultural and linguistic training appropriately. Also, lack of a formalized method of communicating with their employee abroad contributes to the difficulties expatriates face (Du et al., 2010). To avoid the pitfalls of culture shock, social isolation, and domestic difficulties that might accompany a move abroad, expatriates must be well-prepared for their new lives. The employee has an obligation to disclose issues and seek support because they can lead to expatriates' failure if not addressed.

Some of these expatriates integrate easily into the Nigerian environment, while it is a stumbling block to others. These challenges affect some expatriates' performance, and it results in an abrupt ending of the assignment, thereby resulting in considerable loss of income for the organization and loss of respect for the expatriate concerned (Nwankwo, 2014). These challenges must be addressed and

eliminated for expatriates' assignments to be fruitful since such assignments have been proven to be cost-intensive and inevitable. The rationale for this research is necessitated by the need to critically assess the integration challenges expatriates in the Nigerian oil and gas sector experience, and how they affect their performance. The integration measures adopted by some expatriates to integrate easily into the Nigerian environment will also be critically assessed in order to find a link between the two.

Some studies have highlighted and discussed the critical issues experienced by expatriates in the Nigerian oil and gas sector with the aim to raise awareness about the issues and also provide a solution for the expatriates (Akinlo, 2012). However, Heirmac (2015) posited that despite vast studies conducted on expatriates in Nigeria since after independence, expatriates in Nigeria's oil and gas sector are still affected by various integration challenges, which affect their performance in Nigeria. This reality has mandated the need to distinguish between integration challenges of expatriates on short and long-term assignments. Nevertheless, these are not always crystal clear because some expatriates fail while some succeed in their various short or long-term assignments. For instance, the research conducted by Eze and Awolusi

(2018) revealed that the majority of the expatriates noted that short-term assignments have no negative effects on their performance, thus, they prefer long-term assignments. This alone should raise questions about long term assignments and the reason it is preferred instead of the short-term that has no negative effects on the expatriates. Also, what are the approaches adopted by some expatriates to adopt into the Nigerian environment? This should also raise questions about how the human resources management of the company assigns tasks to these expatriates. Do they consider the expatriate's integration challenges? This study contends that there is room for improvement in the current state of integration challenges expatriates face in Nigeria's oil and gas sector, and there is a need to investigate the nature and issues that are critical in both short and long-term assignments.

This research is based on the premise that multinationals management should develop a more adaptable approach in aiding expatriates' challenges in Nigeria arising out of the conflict of personality, culture shock and communication. The human resources management of these organizations possesses the power to develop new strategies and approaches that will make work easier for the expatriates, and a large

default on their side largely affects the employees and the state of the organization.

1.2 Objective of the study

There is a need to investigate the integration challenges of expatriates in Nigeria's oil and gas sector over the years and how it affects their performance, and also how the theory of work adjustment can be successfully applied to make them adapt to the work environment easily. Through this, the research hopes to reveal the critical issues that are applicable to their integration into Nigerian society. Consequently, the effects of these challenges on the expatriates would be well studied and understood to reduce or eliminate any bad occurrence prevalent to happen to any expatriate in the future. It is expected that the research discover various common patterns of integration culture applicable/employed to the expatriates in the Nigerian oil and gas sector and how it relates to the challenges that have been detected among selected cases. The specific objectives are given below:

- i. to investigate the most significant integration challenges that have contributed to expatriates' inefficient performance in Nigeria's oil and gas sector,
- ii. to understand how these challenges that are responsible for bad performance in selected cases could have been prevented or fixed through

the application of work adjustment theory, and

- iii. to recommend workable solutions for ensuring a strong integration culture for expatriates in Nigeria that can effectively prevent, detect and resolve the occurrence of bad performance among expatriates in the Nigerian oil and gas sector.

The above objectives led to the following research questions.

- i. What are the critical integration challenges faced by expatriates in the Nigerian oil and gas sector?
- ii. How can expatriates integrate easily into the Nigerian environment without affecting their performance?
- iii. What are the measures that need to be in place to ensure the effectiveness of workable solutions in preventing the occurrence of bad performance?

1.3 Literature Review

The challenges of expatriates in the Nigerian oil and gas have been widely discussed in previous studies. Many scholars approached the phenomena from different angles depending on which aspect of integration they consider expedient at the time of their research. However, one may not be wrong to say that the topic of expatriate performance and challenges are inexhaustible owing to

the different political, economic and social factors influencing it. Okpara and Kabongo (2011) stated that communication difficulties, climatic change and culture difference are the major issues expatriates face in Nigeria that affect their performance. They further stated that since these factors can affect the performance of expatriates while on international missions, the better it becomes for both the expatriates and the respective organization that bear the burden of financial losses when these expatriates fail to achieve their objectives to become aware and develop strategies such as cross-cultural training.

On the cultural attitudes of Nigerians towards westerners, Okpara and Kabongo (2011) asserted that the cultural characteristics of the society may present a major challenge for western expatriates in Nigeria. For example, they may not understand why nepotism and favoritism are common in most modern organizations in Nigeria. On the influence of gender in expatriates' integration, Heirmac (2015) argued that female expatriates might have problems integrating into the society because, in some Nigerian cultures where women do not have equal status with men, the environment render the female expatriate ineffective. While Okpara and Kabongo (2011) analyzed the challenges from a general point of view, Heirmac (2015)

studied the challenges from a gender point of view which showed that the integration challenges of expatriates may be more complex than what it seems in the Nigerian oil and gas sector. Tung (2016) agreed with this as she stated that the issue of expatriation is complex even when the organization makes efforts to help expatriates adapt to the foreign environment.

On expatriate adaptability and adjustment into the Nigerian society, Eze and Awolusi (2018) argued that even with expatriate adjustment into the society, the environment still needs to be calm and serene, and expatriates' socio-cultural and psychological characteristics can only reflect in that society when the ambiance is right. Okpara and Kabongo (2011) also stated that the culture, history, and general behavior of Nigerian citizens is another factor that can reduce the expatriate's level of anxiety, anger, frustration, and concern, which may have impacted expatriate performance negatively. This poses a critical challenge for some expatriates whose personalities may be very different from the ambiance of the environment, which will later affect their performance in their various assignments. A study on the implications of communication problems, short-term assignments, cultural differences, expatriates' characteristics, and environmental circumstances on expatriate assignment performance in Nigeria is long

overdue (Maley & Moeller, 2017; Lin-Hi & Blumberg, 2016). Many firms cross-post workers with joint venture enterprises, so this research is important for understanding the elements that can affect an expatriate employee's performance while on overseas assignment. The traditional idea of transporting employees (and their families) to unfamiliar places should be scrapped. Provisions should be established for employees departing their comfort zones to ensure their survival and essential job duties (Romani et al., 2016).

Old practices of dispatching expatriates without sufficient planning should be revisited (Maley & Moeller, 2017). The failure of an expatriate in my organization is costly and heartbreaking. Some people grow so irritated or depressed that they try to kill themselves out of shame or pride. Failure leaves an individual with a sour taste and an organization with empty coffers (Karaosmanoglu et al, 2016; Hjerto & Kuvaas, 2017). In a company which handles flammable liquids/gases, poor performance is much more concerning. Hydrocarbons can ignite spontaneously, and the outcome is scary. Therefore, all conditions needed for an expatriate worker to perform successfully must be met; they must be well supported (psychologically, emotionally, and physically) before, during, and following the deployment (Sugathan et al, 2017). Tung

(2016) emphasized that researchers generally disregard the expatriate's professional path after returning home. Research should examine whether international assignment benefited all expatriates evaluated (Maley & Moeller, 2017). Like previous scholars, Tung (2016) acknowledged that expatriation and repatriation's concerns are difficult. She observed that while companies help expatriates acclimate to the foreign environment with pre-departure workshops as well as other mobility support, career progression prospects and relocation following return are frequently disregarded.

1.3.1 Gaps in the Knowledge

The existing body of literature already showed that various environmental challenges play an important role in the performance of expatriates in the Nigeria oil and gas sector. Also, different studies showed that expatriates' personalities, gender, and social background play a huge role in this process which can lead to good performance or bad performance depending on the context. However, there is a lack of sufficient clarity on the specific integration challenges that determine and mark a distinction between short and long-term expatriates' assignments. Also, there is a need for clarifications on specific approaches/techniques employed by some expatriates to integrate easily into the

Nigerian environment. This study sets out to advance the existing body of literature in this area by examining recent integration approaches adopted by some expatriates and integration challenges of expatriates in the oil and gas sector to discover common patterns in expatriates' integration into the Nigerian environment and the impacts on their performance.

1.4 Methodology

This study adopts mixed method which combines both qualitative and quantitative methods of research (Malina *et al.*, (2011). In this case, the quantitative method of research is employed to examine the relationship between variables, the challenges of expatriates in Nigeria and their assignment's performance, in order to analyze and represent the relationship through statistical analysis and inferences established. The qualitative method of research is also employed since it allows in-depth examination of human behavior (Braun *et al.*, (2017). An interview or focus group discussions on thoughts and views of expatriates in the Nigerian oil and gas sector on integration approaches they have adopted in Nigeria and how it has played a huge role in their adaptability into the Nigerian environment will be conducted. This paper is proposing an exploratory case study research because it can give an in-depth insight into the research topic and also plans

to make use of archival research and secondary sources to examine the integration challenges of expatriates in the Nigerian oil and gas sector in order to produce a research report that is theoretically informed by several related works of literature particularly in the areas of expatriates' integration and work adjustment theory.

1.4.1. Population, Sources of Data and Sampling Technique

A random sample strategy is used for the data collection process during the sampling phase. A valid generalization of the outcomes gained for this investigation will be made possible as a result of this. In addition, the data will be collected from the geographical regions of Nigeria, as well as from primary sources, which included personnel in the oil and gas industry, and secondary sources, which included research databases. This allows for a thorough perception of integration challenges of expatriates in the Nigerian oil and gas sector.

1.4.2. Data Analysis Technique

This study makes use of quantitative methods for data analysis. The goal of quantitative research is to acquire data that can be quantified and used to develop generalized results, and this is accomplished by the use of mathematical, algorithmic, or

statistical methods to the study of human behaviour. Polls, questionnaires, surveys, tables, charts, and graphs are all tools that can be used in this research analysis to learn more about a topic and develop broad conclusions about it, such as patterns to look for, events to anticipate, or relationships to test hypotheses about. Statistical Package for the Social Sciences (SPSS) was used for data collection and analysis (Selmer & Luring, 2010; Tharenou, 2011, 2013). Strength and correlations between the various constructs were analyzed using correlation analysis (Selmer & Luring, 2010; Tharenou, 2011, 2013).

1.4.3. Work Adjustment theory

This theory explains and describes how workers adjust to their work environment; it explains adjustment as the interaction of a person with the environment (Dawis, 2005). Work adjustment is one of the most proximal predictors of expatriates' performance, and adjusted expatriates are more likely to perform more effectively in their various assignments, be it short or long term, because they are more comfortable with various aspects of their jobs. Black and Gregersen (1991) described work adjustment as the adjustment to work values such as expectations and standards in the host country. This theory is sometimes referred to as the person-environment correspondence theory, which was originally

developed by Rene Dawis, George England and Lloyd Lofquist from the University of Minnesota in 1964.

This theory acknowledges that the correspondence between person and environment may not be perfect, probably because an individual chose a wrong career or an employer chose a wrong candidate. The flexibility of a person or an environment will determine the extent to which they can tolerate any lack of correspondence between abilities and requirements, and/or values. A good combination of work adjustment results in job satisfaction and satisfactory job performance. A poor match leads to worker dissatisfaction and poor performance. As proposed by Dawis (2002), Person-environment correspondence theory focuses on how two different types of person-job fit, which are needs- supplies fit and abilities-demand fit, which ultimately predict job tenure. Abilities-demand fits the correspondence between the knowledge and skills of the individual and the demands of the job, whereas needs and supplies fits describe the correspondence between the needs and values of the individual and the strength that the job can supply.

The work adjustment theory proposes active and reactive strategies that individuals might adopt to improve their work circumstances.

The theory provides valuable recommendations for helping workers who struggle with job dissatisfaction and poor performance due to several reasons. Work adjustment theory is focused on in this research because it is the most prominent vocational theory that is particularly concerned with predicting employee turnover. The work theory is the best practical example of how expatriates should relate to their environment and integrate

easily into the environment as it sets a path to be followed to improve their performance in their assignments.

1.5. Results and discussion of findings

Table A shows the demographic characteristics of respondents. The respondents' age ranges from 20-50 years and above, working in the oil and gas sector, with different educational backgrounds. All have worked between 1-20 years and above.

Table A: Demographic details of respondents

Demographic characteristics	Number	Percent
Gender		
Male	129	98.47
Female	3	1.55
Age range		
20 – 30	0	0
31 – 40	17	12.85
41 – 50	30	20.77
51 - 60	30	20.77
61 and above	32	23.60
Marital status		
Married	0	0
Single	120	100
Experience		
1 -5 years	25	19.45
6 – 10 years	25	19.45
11 – 15 years	47	35.92
16 – 20 years	24	18.46
	10	7.70
21years and above		
Sector		
Oil and Gas	120	100

Data was collected and analyzed through Statistical Package for Social Sciences (SPSS) (Selmer & Luring, 2010); Tharenou, 2013). Correlation analysis was carried out to examine the strength and relationships between the different constructs (Selmer & Luring, 2010; Tharenou, 2013). The results of these

analyses are shown in Table A. The correlations in Table A agreed with the strength of all constructs, which shows significant positive relationships amongst the constructs at different levels of significance. The mean and the standard deviations validate the different data collection (Inkson & Myers, 2003).

Constructs	Obs	Mean	SD	1	2	3	1	2	3
OPERF	131	4.22	0.945	1.01					
EC	131	3.38	0.932	0.40***	1.01				
WFRC	131	4.25	0.832	0.26*	0.32**				
						1.01			
OPERF	131	3.67	0.845	0.25*	0.32**	0.32**	1.01		
EC	131	3.13	0.934	0.26*	0.32**	0.36*	0.32**	1.01	
WFRC	131	3.29	0.932	0.22*	0.32**	0.26*	0.32**	0.32**	1.01

Remember: *p≤0.1, **p≤0.05, ***p≤0.001

1.5.1 Testing of research hypotheses

Hypothesis 1-5 Analysis, Presentation, and Interpretation of the Result

4.1.1. Specification, Measurement of the Model Variables and results for Hypothesis 1-5

MODEL

$$EAPERF = a_0 + a_1COD + a_2STA + a_3COD + a_4EPC + a_5DCC + e \text{ ----- (1)}$$

Regression Analysis

Table B: Regression Results: Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the estimate
	.672a	.512	.582	.68438

Source: Researcher Framework

Where

EAPERF means expatriates' assignment performance, STA is a short-term assignment, COD is communication difficulties, CUD is a cultural difference, DCC is a difference in climatic conditions, EPC is Expatriates' personal characteristics, and a 0, a1, a2, a3, a4, and a5 are the estimated parameters, while e is the error term.

According to Laring& Selmer (2010), the coefficient of determination (R squared) shows the changes/ difference in our dependent variable due to changes in the independent variable. Therefore, the adjusted R squared was 0.582, which simply

means that 58% variation in expatriate performance is caused by changes in all the critical factors, while the remaining 42% are factors that are not shown in the model but affect expatriates' assignment performance.

Table C: Regression Results: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	573.855	3	158. 878	142.862	.000
Residual	258.115	135	1.158		
Total	836.970	138	160.036		

Source: Researcher Framework

The value for the F-calculated of 0.000 was greater than the critical value of 0.05; therefore, we reject the null hypothesis based on the decision rule, which states that the critical factors or challenges will affect expatriates' assignment performance.

1.5.2 Discussion of Findings

Summarily, the study posits the integration challenges of expatriates in the Nigerian oil and gas sector. The objectives of their assignments and the duration of assignments are enough for the expatriates to adapt and execute their assignments though they agreed that they could perform better with longer durations. Furthermore, the results also discovered a clear cultural difference between Nigerian culture and that of the expatriates in terms of language, educational system, food, dressing. Several expatriates, due to no cross-cultural training, experience

culture shock as age, experience, and attitude play an important role in expatriate performance. Studies have shown that experienced expatriates who are young with positive attitudes make excellent performance. The results above showed that gender has no visible effect on expatriate performance. Expatriates agreed that climatic conditions such as rainfall, sunshine, and heat in Nigeria contributed positively to their performance. On communication difficulty, the majority of the respondents (67%) agreed that they had appropriate communication before coming to Nigeria, communication is seamless in their organization, and the expatriate assignment program is well documented. Half of the respondents (50%) agreed that two-way communications are crucial, and 61.3% agreed that the organization communicates the challenges of expatriates'

assignment organization properly. This open communication on challenges of expatriate assignment in Nigeria positively affects the performance of the expatriates. The majority of the respondents (66%) also agreed that before they proceeded on their journey, the expatriates' assignment and its objectives are communicated to them, which positions most of the expatriates for larger exploits. Expatriates are advised to learn the language of the locals ahead of time to enable them integrate and adapt easier. This fact may have resulted in 84.2% of the expatriates communicating properly and freely with the locals. The result of our first question showed that communication difficulty has a negative effect on expatriate performance in Nigeria, as we hypothesized (H1) previously.

From these results, 78.76% of expatriates agreed that their adaptation was not affected by short-term assignments, and 65.66% also agreed that the period of their assignment is sufficient for them to carry out their assignments appropriately. Then, majority of expatriates (65.66%) also agreed that owing to the short duration of the assignment, STA separates them from their families since they cannot take their family along with them. Conversely, 50% agreed that long-term assignments unite them more with their families, and 78.76% agreed that LTA generate better performance. Though long-

term assignments are preferred, short-term assignments do not have negative effects completely as hypothesized (H2).

The main result from this survey on the integration challenges of expatriates in the Nigerian oil and gas sector in Nigeria showed that 50% of the expatriates experienced culture shock, and 89.88% did not receive cross-cultural training before coming to Nigeria. The majority of the respondents disagreed that the food in Nigeria and their respective countries are similar, men have more respect for their culture, and elderly people are treated better in their country than in Nigeria. Some of the respondents neither disagreed nor agreed on the similarity of Nigeria's educational system and theirs. Several respondents disagreed that there is cultural similarity and general way of life between their country and Nigeria. This finding confirmed our third hypothesis (H3).

The majority of expatriates (>75%) agreed that age and experience improved their performance. They didn't show any difference in whether gender influences their performance at work or not. This confirmed the fourth hypothesis (H4).

Most of the respondents (>60%) observed that there is a difference in climate, rainfall and general condition between Nigeria and their country.

About 65% of respondents disagreed that that life became more difficult due to climate change or Nigeria is hotter than their countries. More respondents (>65%) agreed that the climate in Nigeria is moderate and encouraged expatriates to perform better. This answer approved hypothesis (H5)

From the study, we observed that all the expatriates are satisfied working in Nigeria. More respondents (>75%) agreed that since they came to Nigeria, they received adequate support during their assignment, and their careers had grown. The expatriates also agreed that the climate conditions in Nigeria contributed to their great performance at work. Some of the respondents (50%) were undecided about their family members being happy staying in Nigeria while they embark on their assignments. All the expatriates strongly agreed that their expatriates' assignment in Nigeria is a success.

According to Groysberg and Abraham (2014); Molinsky and Melissa (2016), the findings above are similar to many previous studies. Particularly, Groysberg and Abraham (2014) observed the significant effect of experience and family factors on expatriates' assignments. The study, therefore, concludes that before an expatriate should embark on an assignment, he/she should first consider the challenges

the assignment would have on his family, skills, experiences, and networks. Furthermore, for international assignments to be successful, expatriates should have an open mind and learn to adapt to foreign cultures focusing on the skill to be developed (Molinsky & Melissa, 2014).

1.6 Implications

My research on the integration and challenges of expatriates in the Nigerian oil and gas sector is workable because it aimed to reveal the integration challenges of expatriates in the oil and gas sector and how it is being managed. The research revealed the process in which these expatriates integrate into the Nigeria work and social environment over the past few years. I believe this research can be helpful to multinationals organizations since expatriates are an important part of the business and they are indispensable; the research benefits the human resources departments of multinational companies because the critical positioning of an expatriate is crucial to the human resource department.

By revealing the integration challenges expatriates face in their work country using cases of expatriates in Nigeria as a reference, organizations can learn from their past mistakes and develop new strategies that will make integration easier for

expatriates. Therefore, the study also help to reveal specific challenges specific to short-term and long-term assignments and other critical integration challenges that affect expatriates in the Nigerian oil and gas sector.

1.7 Conclusion

Similar to previous studies, findings from this study revealed the challenges such as short-term assignment (STA), expatriate's personal characteristics (PC), communication difficulty (COD), cultural difference/diversity (CUD), and difference in climatic conditions (DCC). These challenges contribute to the result of expatriate performance depending on the way the challenge is managed, which can be positively or negatively.

The data also revealed that majority of the expatriates are males of various experiences in the oil and gas industry with various age ranges, and are all single with various levels of education. However, from the findings of this study, it can be deduced that all the challenges (short-term assignment, communication difficulties, expatriates' personal characteristics, difference in climatic conditions, and cultural differences) are significant factors affecting expatriates' assignment performance in the oil and gas sector. The challenges and expatriates' assignment performance were statistically significant at 5 percent level.

These results indicate that the challenges of the expatriate in the oil and gas sector can be influenced by the factors mentioned. The findings can be summarized as follows:

- i. Long-term assignments are preferred by expatriates for greater performance, and Short-term assignments might not be as negatively influential.
- ii. Communication forms a good foundation for success in an expatriate assignment in Nigeria.
- iii. Cultural differences have is not a major challenge on expatriate performance in Nigeria, but cross-cultural training can help to decrease culture shock and improve performance.
- iv. Expatriate's gender is hardly of any influence, while age and experience are very important in expatriate performance in Nigeria.
- v. The climate condition in Nigeria is generally pleasant to expatriates and made their performance in the oil and gas sector easier.
- vi. Based on the above findings and summary, cross-cultural training is recommended to aid most expatriates who did not have cross-cultural training to reduce culture. As such, employers are highly recommended to communicate with the expatriates

whether assignments are short-term or long-term.

1.4.2 Limitations

Due to the scope of the research, the findings may not be generalized to other organizations in the industry. Also, some expatriates might be afraid to give honest answers for fear of being victimized, but the reassurance of anonymity was given strictly. The use of secondary data in the research may have another aim and objective, different from what is required in this research; therefore, they may not be compatible with the research questions. Also, the use of archival research poses other limitations, such as the exemption of relevant materials which may not be available in the selected database. Furthermore, the selection of materials is based on the personal judgment of the researcher, which may also lead to the exemption of other relevant researches.

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Impact of Covid-19 Pandemic on Nigerian Capital Market: The Imperative of Testing the Efficacy of Efficient Market Hypothesis

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Abstract

In this paper we reviewed the efficacy of Efficient Market Hypothesis (EMH) on the outbreak of Covid-19 on Nigerian Capital Market. The EMH is a theory based on informational efficiency by the capital markets owing to their quick and instantaneous incorporation of new information. The study tested the market in two parameters: to confirm the randomness (efficiency of the market) using run-test, and to confirm the effect of Covid-19 protocols on some economic fundamentals using regression analysis. The result of the run-test of the daily Nigerian capital market data (April, 2020 to July 2020) revealed randomness within the period under review. The regression analysis however revealed significant relationship between the markets and some economic fundamental indicators (inflation and international price of crude oil) of the economy. The paper concluded that the Nigerian Capital Markets revealed randomness signifying a weak form of EMH as news about the Corona Virus was incorporated slowly but not instantaneously during the period under review, and hence, the pandemic did affect the market. The study also posited that EMH can be tested and validated not only from economic or finance point of view but also from public health view of the outbreak of Corona Virus. The paper recommended that policy makers in the country should devise a proper hedging mechanism to be put in place to mitigate any unforeseen negative market reactions in future as a result of any health pandemic.

Keywords: Corona Virus (Covid-19), Efficient Market Hypothesis (EMH), Run-test, Randomness, Informational efficiency.

1.0 Introduction:

Capital markets all over the world have traded wildly for over a year since the outbreak of Covid-19 popularly called the Corona Virus; as event managers, investors and policy makers have tried to come to grips with the sudden rise in the number of virus cases, and the threat to the global economy posed by measures to contain the pandemic (Moon, 2020). For example, Wall

Street (2020) was gripped over the spreading of Covid-19 as stocks tumbled and investors rushed into the safety net of government bonds, and oil prices nose-dived in the global oil market. Reports showed the world is likely to go in recession, as analyst at United Nations (UN) say the world's \$80 trillion economy will decline by \$1 trillion to \$2 trillion – a close to 3% contraction in 2020 to 2021 (Akanni & Gabriel, 2020).

Business activities have been disrupted globally as Covid-19 pandemic intensify and worldwide gatherings (in terms of conferences and workshops), sporting events, economic transactions have all been affected by the outbreak. Economically, according to Ezebuike (2020), the global supply chain substantially relies on production from China and the disruption in China, thus affects almost all economies and markets as a result. American, European and African markets have been on a bearish run and from the home front; the pandemic has been of dilapidating effect on the Nigerian economy. Nigeria’s revenue is 80% from oil receipt and the 2020 budget was benchmarked on the crude oil price of \$57 per barrel. However, the ongoing disruption

caused by the Covid-19 pandemic has plunged crude oil prices to below \$29 per barrel as at April 2020, necessitating the review of the budget downward (Ezebuike, 2020).

Since the advent of the Corona Virus pandemic, global capital markets all over the world has witnessed a sharp decline in their activities as their All share index nose-dived to a record low, signifying the intensity of the pandemic and the information available to the investing public that affects the markets globally. Figure 1 below, shows the impact of covid-19 since the outbreak on the world largest stock market; The Nikkei of Japan, Dow Jones of the USA and FTSE of the United Kingdom, all trading at a negative territory (Bloomberg, 2020).

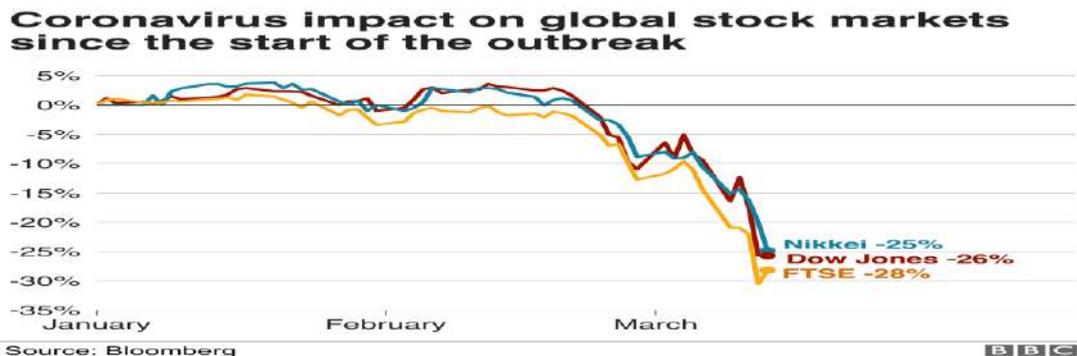


Figure 1. Covid-19 impacts on Global stock markets (Jan to April, 2020)

In a paper presented at the IMF, Gopinath (2020) stressed that the world has changed dramatically in the last 3 to 4 months (i.e. January to April, 2020) as a result of a rare disease, a Corona Virus pandemic that resulted in a tragically large number of

human lives being lost. As countries implement necessary quarantines and social distancing practices to contain the pandemic, the world has been put in a great lockdown. The magnitude and speed of collapse in economic activity that has followed is unlike

anything experienced in our lifetimes since the great depression of the 1930's.

Segal and Gerstel (2020) argued that, this is truly a global crisis as no country is spared. Countries reliant on tourism, travel, hospitality and entertainment for their growth are experiencing particularly large disruptions. Emerging markets and developing economies face additional challenges with unprecedented reversals in capital flows as global risk appetite wanes and currency pressures, while coping with weaker health systems, and more limited fiscal space to provide support. Moreover, several economies entered this crisis in a vulnerable state with sluggish growth and high debt levels.

The covid-19 pandemic has brought an unprecedented crisis globally; people and governments globally are still struggling for solutions to deal with the crisis. The effects are very broad based, be it on health, way of life and economics. With global economy plunge into recession in 2020, studies have shown that some countries did experienced the recession within a short period, like the USA (Blake, 2021) as according to US National Bureau of economic research, the contraction lasted just three months (February to April, 2020). Conversely, it lasted several months in other countries like Nigeria as the economy shrinks two quarters

in a row amid contraction in its oil sector (Aljazeera, 2020). According to the world bank (2021), the impact of Covid-19 outbreak on capital market globally at the initial stage has been acute with sharp price adjustment observed across fixed-income and equity markets and in the process triggers the following developments; liberal market volatility and repricing. Hence, the objective of this paper is to empirically test the efficacy of EMH as a result of Covid-19 pandemic in the Nigerian capital market with a view to ascertained its level of efficiency.

In Nigeria, Covid-19 case was officially identified on the 27th of February 2020 and few more cases were identified afterwards (Effiong, 2020). The consequences of Covid-19 on the economy and financial markets in Nigeria are: economic lockdown of major cities (Abuja, Lagos, Ogun, Kano states) on the 30th of March 2020 leading to economic loss especially for daily income earners from small, medium scale businesses, withdrawal of money by investors from the capital market and fall in oil prices with a sharp devaluation of the nation currency, the Naira (Ozilli, 2020)

Being into this bizarre situation, the objectives of this paper is to review the efficacy of EMH on the outbreak of Corona Virus on global capital market with

emphasis on Nigerian Capital Market (NCM) and also to look at how policy makers play their role in offering solutions to this crisis that needs to be explored, studied and discussed.

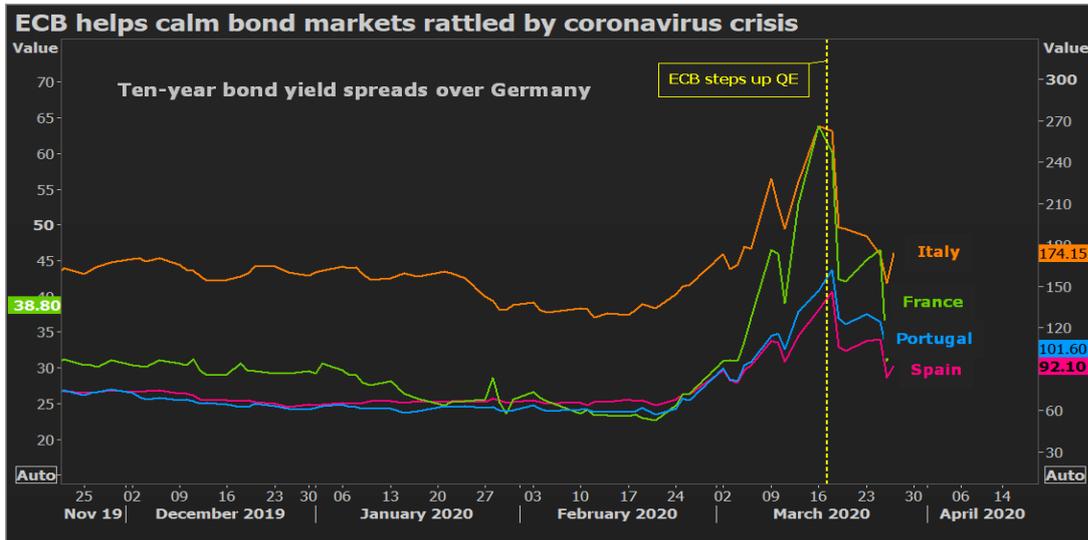
1.2 Statement of the problem

An important debate among investors is whether the stock market is efficient—that is, whether it reflects all the information made available to market participants at any given time. The EMH maintains that all stocks are perfectly priced according to their inherent investment properties, the knowledge of which all market participants possess equally. However, financial theories are subjective in nature. In other words, there are no proven laws in finance but rather ideas and experience that try to explain how the market works (Dhir & Kvilhaug, 2021). In this study, we take a look at where the EMH has fallen short in terms of explaining the stock market's behaviour especially in the era of Covid-19. While it may be easy to see a number of deficiencies in the theory, it's important to explore its relevance in the modern investing environment of which Covid-19 pandemic has given an excellent opportunity.

Seasoned investors such as Warren Buffet, George Soros and many academicians have disputed the EMH both theoretically and

empirically. A major theory challenging the EMH is Behavioural Finance Theory which attributes imperfections in financial markets to a combination of cognitive biases such as overreaction, over confidence, herding behaviour, representative bias, information bias and various human errors in information processing and reasoning. The consequences of these being that some investors make abnormal return (profits) while others incur losses in all the three forms of market efficiency (Pillai & Pillai, 2021).

With economic activity disrupted and capital markets dislocated worldwide, investors and researchers have been debating if COVID-19 could derail the global financial cycle. According to Stanley (2020) given the sharp drops in global asset markets recently, the Corona Virus could deliver a sizable impact to global growth in the first half of the year 2020. Nigeria, like most countries, was hit on two fronts; directly as a result of cases in the country, and indirectly, due to our closeness with—badly hit China, our number one infrastructure financier and trading partner, plus our reliance on global oil prices (Akanni & Gabriel, 2020). The effect of the pandemic can be seen from Figure 2 below, with some European countries markets and the reactions of their stock markets.



Source: European Central Bank [(ECB), 2020

As the Corona Virus succeeded in shaking up the financial market around the globe, Quiggin (2020) reported that the pandemic has provided yet more evidence against the EMH. In reality, financial markets woke up to the severity of the crisis around the same time as the general public with privilege information tried and outsmarted the markets based on the assessment by government analyst, pointing to the likely severity of the crisis and in the process, sold their shares early and make huge returns, as in the case of U.S. Senator Richard Burr.

Analyzing the impact of Covid-19 on Nigerian economy, Ozilli (2020) found that the economic downturn in Nigeria was triggered by a combination of declining oil price and spillovers from the covid-19 outbreak, which not only led to a fall in the demand for oil products but also stopped economic activities from taking place when

social distancing policies were enforced. Then, Nigerian government responded to the crisis by providing financial assistance to businesses, not to households that were badly affected by the pandemic. The monetary authority adopted accommodative monetary policies and offered a targeted 3.5 trillion naira loan to support some sectors of the economy. Despite the loan, economic agents refused to engage in economic activities for fear of contracting the Covid-19 disease that was spreading very fast at that time.

Analyzing the global economic outlook in an IMF paper, Gopinath (2020) asserted that for the first time since the Great depression, the advanced economies, emerging markets and developing economies were in recession. For year 2020, growth in advanced economies is projected at -6.1 percent. Emerging market and developing

economies with normal growth levels well above advanced economies are also projected to have negative growth rates of -1.0 percent in 2020, and -2.2 percent, while

China recorded a growth rate of +1.1 percentage point and Nigerian economy recorded a -3.4 growth as shown below in Table I.

Table1. World Economic Outlook Growth Projections: The Effect of Covid-19 Pandemic

Real GDP, Annual Percentage Change	2019	2020	2021
World Output	2.9	-3.0	5.8
Advanced Economies	1.7	-6.1	4.5
United States of America	2.3	-5.9	4.7
Germany	0.6	-7.0	5.2
France	1.3	-7.2	4.5
Italy	0.3	-9.1	4.8
Spain	2.0	-8.0	4.3
Japan	0.7	-5.2	3.0
United Kingdom	1.4	-6.5	4.0
Canada	1.6	-6.2	4.2
China	6.1	1.2	9.2
India	4.2	1.9	7.4
Russia	1.3	-5.5	3.5
Brazil	1.1	-5.3	2.9
Mexico	-0.1	-6.6	3.0
Saudi Arabia	0.3	-2.3	2.9
Nigeria	2.2	-3.4	2.4
South Africa	0.2	-5.8	4.0

Source: IMF, World Economic Outlook, April, 2020.

According to Nigerian stock Exchange (NSE, 2020), the novel Corona Virus pandemic caused a severe slowdown in global growth in Q1 2020. On the back of aggressive isolation measures and nationwide lockdowns in major economies, the first quarter of the year was characterized by weak consumer demand, steep declines in global oil prices and bearish stock markets. At the NSE, all equity market indexes ended the quarter in negative territory, despite major gains

recorded in January 2020 when it became one of the best performing indexes in the world, the All Share Index of the NSE closed the quarter at 21,300.47 points, down 31.38% from Q1 2019.

Fitch (2020), the world renowned rating agency, asserted that the increased market volatility is likely to reduce issuance activity, which hurts capital market revenues. The rating agency further continues that, while volatility can sometimes drive revenues, recent market

swings and spikes in trading volumes indicate a high level of uncertainty over the intensity, geographic reach and duration of the Corona Virus. The rating agency argued that the current market situation is similar to the selloffs in the fourth quarter of 2008 and in the first quarter of 2016 when transaction volumes plummeted after investors reshuffled their portfolios due to global meltdown of those years. While investment strategists remain cautiously optimistic about capital market activity later in the year, many of their best-case scenarios are contingent on the containment of the virus in the near future.

According to IMF, the assumption that the pandemic and the required containment peaks in the second quarter of the year for most countries in the world may ultimately recedes in the second half of this year as the global growth in 2020 is projected to fall to a negative -3 percentage point. This is a downgrade of 6.3 percentage points from January 2020 projections. This makes the great lockdown the worst recession since the great depression, and far worse than the global financial crisis of 2008. As a result, the cumulative loss to global GDP in 2020 from the pandemic crisis could be around nine (9) trillion dollars, greater than the economies of Japan and Germany combined (IMF, 2020).

Generally, there are no studies in Nigeria that sought to establish the informational efficiency (Efficient Market Hypothesis) of the Nigerian capital market to the announcement of Covid-19 pandemic using a run-test statistical analysis. While studies have been conducted to investigate the reaction of the Nigerian stock market to dividends, earnings and top management change announcements and market reactions to Initial Public Offerings (IPOs), there are however, no studies that are known to the researchers that were conducted on the reaction of the market to the current global pandemic of Covid-19 using a run-test statistical analysis, hence, the gap of the study. It is therefore, the considered opinion of this researchers to review other important studies on market reactions to other corporate event announcements globally and link them with capital market reactions with any available news on Covid-19.

Based on the aforementioned problem this paper seeks to answer the following questions.

- i. Does Nigerian capital market exhibit strong, semi-strong or weak form of EMH after the national lockdown was proclaimed?
- ii. How Covid-19 pandemic affect event activities and some economic fundamentals in Nigeria?

The objective of this paper is to review the efficacy of EMH on the outbreak of Covid-19 on Nigerian Capital Market. The specific objectives of the paper are:

- i. to examine the effect of Covid-19 lockdown on capital market in Nigeria and to ascertain the extents of Nigerian Capital Market exhibiting a strong, semi-strong or weak form EMH, and
- ii. to assess the effect of Covid-19 on event activities and some economic fundamentals in Nigeria during the pandemic.

In order to achieve the objectives of this study, the following hypotheses are hereby raised based on the main lines of research identified in the literature:

H₀₁: News of Covid-19 lockdown did not reveal Nigerian Capital Market exhibiting strong, semi-strong and a weak form of the EMH.

Objective number two is sub-divided into the following hypotheses:

H_{02a}: NSE index has been affected by the number of Covid-19 new cases and new death,

H_{02b}: NSE index has been positively influenced by the monetary policy (interest rate),

H_{02c}: NSE index has been positively influenced by inflation, and

H_{02d}: NSE index is significantly influenced by the price of crude oil.

1.3 Scope of the Study:

The study covers a period of 4 month (April 2020 to July 2020). It is believed that the pandemic was at its peak during those periods, and the data is enough to make an informed analysis on market reactions to the announcement of the pandemic and its protocols vis-à-vis capital market reactions.

2.0 Literature Review

Hatmanu and Cautisanu (2021) studied the impact of Covid-19 pandemic on Romanian stock market between March, 2020 to April, 2021 using Autoregressive Distributed Lag (ARDL) bound cointegration and the result showed a significant long-term negative impact of the pandemic on the Bucharest exchange trading index of the Romanian stock market.

El-sayed and Abdelhakim (2021) used multiple regression analysis to investigate the impact of new cases and deaths due to Covid-19 between March 2020 and 10 May 2020 in the Egyptian stock market on 17 sectors (IT, Media, food and beverages, Tobacco and Banking etc.). The study showed that the return of most sectors appeared to be more sensitive to cumulative mortality indicators than to daily deaths, while the new cases from Corona Virus were more important than the cumulative cases of Corona Virus. Kartal et al.'s (2021) study focused on the East Asian countries

(i.e. China, Hong Kong, Japan, Mongolia, Korea and Taiwan). The authors found that market indices to the Covid-19 using quantile regression models revealed negative effect of the pandemic on the studied samples.

Al-Awadhi et al. (2021) examined the effect of Covid-19 on the companies included into the most important stock market indices in China (Hang Seng Index and Shanghai stock exchange composite index) over the period 10 Jan to 16 March, 2020 using a panel data approach and found out that they were significantly negative related to both the daily growth in total new cases and total new deaths caused by the Corona-virus. Similar results were reported by Adenomon, et al (2021) in Nigeria using GARCH models who found a negative effect of the pandemic variables on the stock market from January, 2 to April, 2020.

Zoughrana, et al (2021), conducted a study in Francophone African countries on the stock returns of companies listed on the West African Economic and Monetary Union Stock Market (comprising of Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Mali, Niger, Senegal and Togo) during the Covid-19 outbreak. The paper's aim was to see the effect of governments' Covid-19 protocols measure on companies listed on the various stock markets. The paper found

that social distancing and other government measures were associated with a positive reaction of the market movement, restrictions and lockdown measures contributed to a decline in the stock value.

Evangelos (2021) examined how the largest stock market of the world, the U.S and particularly the S & P500 index, reacted during the Covid-19 outbreak from 2nd Jan, 2020 to 30th April, 2020, using a simple financial analysis procedure. The researchers juxtaposed the released news with the respective market performance in order to see how the market always incorporated available information in time. The result showed that in some periods under review, the market was not moving as it was expected, and the run-test analysis statistically confirmed the author's assumption that, the U.S stock market was not always efficient during the Corona Virus outbreak as the market behaviour was unpredictable for a rational asset pricing model and did not instantaneously incorporate new information about the pandemic.

Tadoori and Vadithata (2021) examined the test of market efficiency during Covid-19 in a select of global market indices. The paper analyzed the efficiency of 44 world major stock exchanges (Asia-Pacific-17, Europe-16, America-6 & Africa-5) from November

2019 to January 2021 and tested whether market shares moved randomly or returned in adaptive nature; that is whether EMH hold true in conditions like Covid-19 era or Adaptive market hypothesis (AMH). The result suggested that the opposite of EMH hold true. Results of the study using variance-test ratio proved that market are adaptive especially in pandemic situation.

Pillai and Pillai (2021) in their paper examined the efficiency of the Indian stock market during the time of Covid-19. The study employed event study as the methodology of the paper and concluded that Indian stock markets were inefficient during the pandemic in the period under review. The paper further proved there were numerous opportunities to make abnormal returns, thereby punctuating the main underpinning aims of EMH and the results of this research helps one to understand investor's behaviour and sentiments.

In Nigeria, Covid-19 case was officially identified on the 27th of February 2020 and few more cases were identified afterwards (Effiong, 2020). The consequences of Covid-19 on the economy and financial markets in Nigeria are: economic lockdown of major cities (Abuja, Lagos, Ogun, Kano states) on the 30th of March 2020 leading to economic loss especially for daily income earners from small, medium scale

businesses, withdrawal of money by investors from the capital market and fall in oil prices with a sharp devaluation of the nation currency, the Naira (Ozilli, 2020)

The pandemic context prompted unparalleled global responses and on the national levels, authority of different countries imposed several containment measures to reduce the spread of the disease, among which are; social distancing, lockdown, wearing of mask and travel bans. All of these measures have had a profound effect on individual country's economy. Ozilli and Arun (2020) studied the impact of social distancing policies on the stock market indicators of Japan, the United Kingdom, the United States and South Africa using a panel data approach. The main results revealed that from 23 March, 2020 to 23 April, 2020, the stock markets were negatively influenced by the number of lockdown days and by the international travel restriction, but showed positive sign by restriction on internal movement.

Following Ozilli and Arun (2020) study, Chowdhury et al, (2021) extended the analysis by including some countries from Europe using similar panel approach. The authors revealed that the number of lockdowns days and the number of Corona Virus patients, restrictions on internal

movements and international travel restrictions affected the stock markets price.

Osagie, Maijama'a and John (2020) using a GARCH models in assessing the effects of Covid-19 outbreak on the Nigerian stock exchange performance from March to April 2020, revealed that a substantial loss in stocks return and high volatility in stock return was reported within the period under review by applying the GARCH models. Adenomon (2020) in his study found that it created an unprecedented level of risk, causing investors to suffer significant losses in a very short period of time as investors panic and moved to sell and salvage their investment. Ozilli (2020) in an analysis of the Covid-19 spillovers in Nigeria found that the existing structural weaknesses in Nigeria economy contributed to making the crisis more severe in the country.

Beck, Flynn & Homanen (2020) analyzed the effect of Covid-19 on emerging markets by employing a survey response from April 2020 across nearly 500 listed firms. The study revealed that vast majority of firms have been negatively affected by the lockdown and hence, reacted by reducing level of investment as stakeholder-centric firms experienced lower stock price declines during the crisis drawdown.

Study conducted by Carlson (2020) on the reactions of the world's stock markets

around the time of the onset of the Corona Virus pandemic seemed illogical to many observers. The S&P 500 stock price index set an all-time record high on February 19, 2020, after over a month's news of the epidemic. The World Health Organization had already labeled it a "public health emergency of international concern" on January 30 when the epidemic had already spread from China to 18 countries. From that high, the S&P 500 fell 34% to a low on March 23, 2020. The economic expert has an explanation for this difficulty based on the idea that markets are "efficient." If markets are perfect, prices will incorporate all publicly available information about the future. Speculative prices will be a "random walk. The changes in prices will look random because they respond only to the news. News, by the very fact that it is new, has to be unforecastable. The market is smarter than any individual as the theory goes, because it incorporates information of the smartest traders who keep their separate real information secret, until their trades cause it to be revealed in market prices.

Studies conducted on more advanced and developed market tends to disprove the underlying assumptions of EMH in the weak form that shares prices are un-predictable. According to Osborne (2009), the EMH states that returns (the opening price subtracted from the closing price) of market

indices in efficient markets behave like Brownian motion. In practice, this assumption is violated mostly by the periodic structure (day, week, quarter, and year) of agent behaviour.

2.1 Theoretical Framework

The underpinning theory for this paper is the Efficient Market Hypothesis (EMH). The theory of the efficient markets has a long history and caused a debate between academics and practitioners for many years now. Some studies gave supportive evidence for the EMH and some others, among them the most recent, did not.

EMH assumes three things according to Fama (1970): all information is available to the market; all investors are rational; and that stocks follow a random walk. The assumption about information comes in three flavours with varying measures of strength. Fama (1972) published a reassessment of efficient market hypotheses theory with an empirical base, and distributed market efficiency into three levels based on information: weak, semi-strong and strong form.

The weak EMH makes the assumption that current stock prices reflect all available information. It goes further to say past performance is irrelevant to what the future holds for the stock. Therefore, it assumes that technical analysis can't be used to

achieve returns. The semi-strong form of the theory contends stock prices are factored into all information that is publicly available. Therefore, investors cannot use fundamental analysis to beat the market and make significant gains. In the strong form of the theory, all information both public and private—are already factored into the stock prices. So it assumes no one has an advantage to the information available, whether that's someone on the inside or out. Therefore, it implies the market is perfect, and making excessive profits from the market is next to impossible.

The hypothesis was developed in the 1960s by University of Chicago economics professors Harry Roberts and Eugene Fama. The latter then formalized the hypothesis in his 1970 paper, "Efficient Capital Markets: A Review of Theory and Empirical Work.". Fama wrote; "A market in which prices always fully reflect available information is called efficient and for the purposes of most investors, the efficient markets model seems a good first (and second) approximation to reality. In short, the evidence in support of the efficient markets model is extensive and contradictory evidence is also sparse."

3.0 Methods

Most of the studies reviewed used parametric and non-parametric analysis on testing the EMH like the serial correlation

test, runs-test and ARDL, event study, GATCH and variance test-ratio (Osagie et al, 2020; Vasileiou, 2020; Hatmanu & Cautisanu, 2021; Evangelos, 2021; Pillai & Pillai, 2021;). This paper adopts a similar method of using both parametric and non-parametric statistics. The choice of this design is warranted by the fact that it seeks to establish the existence and nature of relationships, associations and interdependence between variables (Kumar, 2005).The non-parametric utilizes the use of run-test and parametric employs correlation and regression analysis using a time series data.

The unit of analysis is the Nigerian Capital Market (NCM) covering April, 2020 to July,

2020.To conduct this study, daily data of 110 working days were collected to measure the impact of Covid-19 on the NCM. We consider the NSE index as proxy of the capital market reactions, which is the reference index of the Capital Market in Nigeria.

The analysis was done in two phases as depicted In Table 2. In the first analysis, we employ a descriptive statistics to explain the pattern and characteristics of the data employed, then followed by a run-test to determine the reactions/randomness of the Nigerian capital market on the proclamation of Covid-19 lockdown. The second analysis explains variables that are related to Covid-19 and some economic fundamentals.

Table 2. Operationalization of the Variables

SYMBOLS	DESCRIPTION/OPERATIONALIZATION	SOURCE
NSEi	<u>Variables Concerning Stock Market</u> Nigerian Stock Exchange Index. To measure the impact of Covid-19 on the efficiency of market, we considered NSE index, which is the reference index of the capital market in Nigeria.	Hatmanu & Cautisanu (2021), Evangelos (2021), Tadoori & Vadithata (2021), Pillai & Pillai (2021).
NCC	<u>Variables Related to Spread of Covid-19</u> The daily number of Corona Virus new cases in the country	NCDC (Nigerian Centre for Disease Control)
NCD	The daily number of new Covid-19 Death in the country	NCDC
INFL	<u>Variables Related to Economic Fundamental</u> Inflation as measure by consumer price index in the country	Central Bank of Nigeria (CBN).
INTR	interest rate as dictated by the monetary authority	CBN.
CRUDE OIL	Brent crude oil is the base price for international oil (fluctuations in oil quotations are always followed by economic and social crisis in any country)	OPEC Data

Source: Designed by the author (2022)

3.1 Model Specification

To measure the impact of the Covid-19 pandemic on stock market efficiency, we employ the run-test statistic. The use of this method is adequate for studies with a lower number of sample sizes. However, regression analysis is applied to confirm the existence of relationship between the explained variable and their regressors.

Following the work of Hatmanu and Cautisanu (2021) that analyzed the impact of Covid-19 on Romanian stock market, this study adapts the model but with a slight adjustment. Based on that, the appropriate model for this study is specified as follows.

$$\Delta NSE_i = \sum_{j=1}^n \beta_j \Delta Y_{t-1} + \beta_1 Infl + \beta_2 Ncc + \beta_3 Ncd + \beta_4 Intr + \beta_5 Bco + e$$

$i = 1 \quad j = 1 \quad ij = 0$

Where;

NSE Index = All share index (proxy as market reaction due to Covid-19)

Infl = Inflationary Rate

Ncc = New Corona Case

Ncd = New Corona Death

Intr = Interest Rate

Bco = Brent (International) Crude Oil

$\beta_1 - \beta_4$ = The coefficient of the independent variables

e = error term

4.0 Results and Discussions:

In this section, we present some statistical evidence that quantitatively confirms the efficiency or otherwise of Nigerian stock exchange on weak form. Before the efficiency test (run tests), we examined the descriptive statistic of our sample. Table 3, presents the descriptive statistics which revealed that the data during the examined period from April 2020 to July, 2020 were normally distributed. Figure 1, showed the normality of the distribution using a histogram of the NSE index.

Table 3. Descriptive Statistics of NSE daily Returns during the Period 01-04-2020 to 30-04-2021

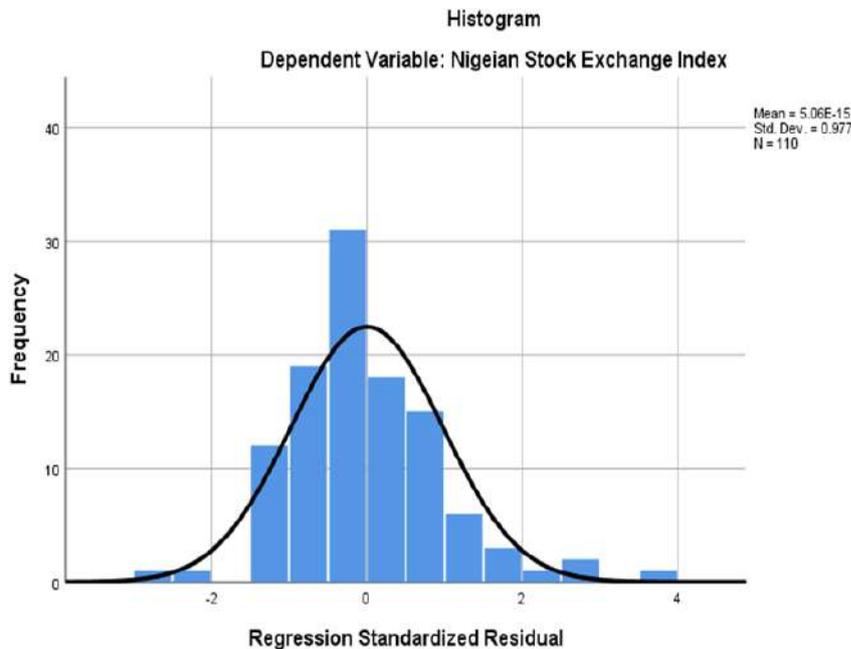
Mean	5.06
Maximum	581.59
Minimum	.00
Std. Deviation	0.977
Skewness	0.913
Kurtosis	1.901
Durbin Watson	1.233**

**significant at 5% level

Source: Computed by the author (2021) using SPSS, v.25.

The average daily return of the market is 5.06 with a minimum and maximum of 0.00 and 581.59 respectively, while the standard deviation of the market is 0.977 signified low volatility/reactions. The skewness measures the length of the tail of the distribution and from the table, it revealed

that the data is positive and the kurtosis which measures the peak of the curve shows that the data is positive and platykurtic implying that the distribution exhibits flatness at the surface. Figure 3 below shows the normality of the data distribution using a histogram.



Source: Author (2021) using SPSS v.25

4.1 Statistical Evidence Regarding Market Efficiency of Nigerian Capital Market (NCM).

In order to identify the efficiency of Nigerian capital market, we employ a random test (Bradley, 1969) which is used to decide if a data set is from a random process. A run-test is a non-parametric analysis and is defined as a series of increasing values or a series of decreasing

values and the number of increasing or decreasing value is the length of the run. To test for hypothesis one, we employ the run-test to detect if there is any randomness of the market within the period under review.

H₀₁: News of Covid-19 lockdown in Nigeria did not reveal Nigerian Capital Market exhibiting a strong, semi-strong and weak form of the EMH.

Table 4: Run Test Analysis

			Runs Test					
			Nigerian Stock Exchange Index	Inflation	New Corona Case	New Corona Death	International Crude oil	Interest Rate
Test Value ^a			238.1381	16.0575	2979.0909	34.7727	55.9018	11.7727
Cases < Test Value			63	30	71	70	55	80
Cases >= Test Value			47	80	39	40	55	30
Total Cases			110	110	110	110	110	110
Number of Runs			33	6	44	41	10	10
Z			-4.275	-9.352	-1.539	-2.260	-8.812	-8.384
Asymp. Sig. (2-tailed)			.000	.000	.124	.024	.000	.000
Monte Carlo Sig. (2-tailed)			.000 ^b	.000 ^b	.132 ^b	.027 ^b	.000 ^b	.000 ^b
99% Lower Bound			.000	.000	.124	.023	.000	.000
Confidence Interval								
Upper Bound			.000	.000	.141	.031	.000	.000

a. Mean

b. Based on 10000 sampled tables with starting seed 2000000.

Source: Computed by the author (2022) using SPSS V.25

Table 4 revealed the result of the run-test carried out from April, 2020 to April, 2021 during the Covid-19 using time series data of the NCM. The decision rule is that if the test statistic (Z-value) is greater than the critical value (upper bound), we conclude that the data is not random at 5% level of significance.

Therefore, since the test statistic in Table 4 (Z = -4.275) is less than the critical value (upper Bound = 0.00) using Monte Carlos critical value number, we reject the null hypothesis that, the time sequence of the

NSE index data during reviewed period is not produced in random manner, which signifies the assumption of the EMH theory. We can therefore conclude that, the Nigerian Capital market exhibited a weak form of EMH as information regarding the Corona Virus was incorporated slowly but not instantaneously.

The above finding is consistent with the findings of Kantal et al. (2021), Chowdhury et al. (2021) and Ozilli and Arun (2020) as regards Nigerian stock market exhibiting a weak form of EMH in their various studies

but at the same time the study contradicts that of Latham (2013), Pillai and Pillai (2021), Tadoori and Vadithata (2021) and Evangelos (2021).

To test hypothesis 2, we employ a regression analysis to determine the impact of the

explanatory variables on the explained variable. To confirm the assumptions of regression analysis a correlation analysis is conducted first, in order to ascertain the association of the explained and the explanatory variables. The table of the correlation analysis is presented in Table 5:

Table 5: Correlation Statistics

Brent Crude oil	Interest Rate	Nigerian stock Exchange index	Inflation	New Corona Case	New Corona Death
Nigerian Stock Exchange Index		1			
Inflation		-.210* (0.02)	1		
New Corona Case		.165 (0.08)	.230*	1	
New Corona Death		.125 (0.19)	-.001 (0.9)	.086 (0.37)	1
Brent Crude Oil		.185 (0.05)	.144 (0.13)	.059 (0.54)	.074 (0.44)
Interest Rate	1	-.126 (0.19)	.134 (-.069)	.544 (-.100)	.091 (0.34)
		.718* (.000)			

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed)

Source: Computed by the Author (2022) using SPSS 25.

The dependent variable when correlated with the independent variables revealed no correlation, also the independent variables revealed the same results (no correlation

among them). This result confirms that regression analysis can be run.

Table 6: Regression Model

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.882 ^a	.777	.255	82.93625	.777	3.558	5	104	.005	1.223

a. Predictors: (Constant), Interest Rate, Inflation, New Corona Death, New Corona Case, International Crude oil

b. Dependent Variable: Nigerian Stock Exchange Index

source: Author’s computation (2022) using SPSS v.25

The model summary indicates that the R-square is .777 which means the models explain 77% of the variables involved and the remaining 23% were explained by other variables not in the model. The Durbin-

Watson Figure of 1.223 which measure autocorrelation is found to be within acceptable limit according to Gujarati (1999) Table of 2.636.

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	122350.843	5	24470.169	3.558	.005 ^b
	Residual	715355.835	104	6878.421		
	Total	837706.677	109			

a. Dependent Variable: Nigerian Stock Exchange Index

b. Predictors: (Constant), Interest Rate, Inflation, New Corona Death, New Corona Case, International Crude oil

Source: Author’s computation (2022) using SPSS v.25

The Anova has an F-statistic of 3.558 and statistically significant at 5% level. Based on that the model can be rely upon for making prediction.

To test for hypothesis 2a to 2d, we employ regression analysis and the result is presented in table 6 below

Table 6: Regression Analysis Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	292.644	337.159		.868	.387
	Inflation	-14.046	4.557	-.291	-3.083	.003
	New Corona Case	.007	.003	.215	2.279	.025
	New Corona Death	.227	.247	.086	.917	.361
	International Crude oil	1.123	.647	.233	1.735	.086
	Interest Rate	6.840	26.273	.035	.260	.795

a. Dependent Variable: Nigerian Stock Exchange Index

To estimate the relevant contributions of the independent variables and their level of relationship vis-a-vis the explained variable, Table 6 provided the coefficients of each of the explanatory variables. Inflation reveals a negative relationship (-14.046) with NSE index but is statistically significant (.003) at 5% level. The coefficient of New Corona Case is positive (.007) and weak but statistically significant (.02) at 5% level. While the coefficient of New Corona death also shows positive relationship (.227), but statistically not significant (.361). International crude oil has a positive coefficient (1.123) and statistically significant (.086) at 10% level. The interest rate is also having a strong positive relationship (6.840) but statistically not significant (.795).

The above result is therefore consistent with the findings of Hatmanu and Cautisanu (2021), Osagie, Maijama'a and John (2020), Zoughrana, et al. (2021), El-Sayed and Abdelhakim (2021). The findings also aligned with Carlson (2020), Bark, Flynn and Homanen (2020) but contradicts Al-Awadhi, et al (2021) and Adenomom, et al (2021).

5.0 Conclusions and Recommendations

The aim of the paper was to review the efficacy of EMH and its resultant effects on Nigerian capital market as a result of Covid-

19 pandemic. The Efficient Market Hypothesis (or EMH, as it is known) suggests that investors cannot make returns above the average of the market on a consistent basis. This is because under normal circumstances, all available information about asset values and prices is rapidly disseminated throughout the market bringing prices quickly to an equilibrium value.

This study found that Nigerian capital market exhibited weak form of EMH as information absorption capacity during the Covid-19 and its protocols were slow and not instantaneous. Based on that, the Nigerian capital market exhibited a weak form of EMH as information about the Corona Virus has not significantly impacted on the trading activities of the markets and therefore, not fully efficient and the digestive power of absorbing information by the Nigerian capital markets is low.

The regression results showed that economic fundamental revealed that inflation was significant and that is why during the pandemic the Nigerian economy did not only slides into recession because of lack of production together with the contagious effect of the global economy, which leads to prices of commodities going in up (inflation). The interest rate was not significant, hence, did not affect the

economy during the pandemic. The international crude oil was significant and positive showing that the economy suffered because of lack of demand from the global oil markets.

The pandemic variable especially did affect the economy as New Corona cases were found to be significant. For any information about the new cases, it will have a profound effect on the economy since investors cannot invest and production activities waned down.

Finally, Prof. Eugene Fama deserves enormous credit for enhancing our understanding of how both investor sentiment and fundamental information about individual companies and the economy influence stock prices. He correctly elucidated how some investors make consistent and predictable errors in the processing of information and how the propagation of narratives about the stock market can become self-fulfilling. This paper used the randomness (Table 4) of the market in response to the COVID-19 pandemic as an example of the market's apparent irrationality.

The EMH incorporates two fundamental tenets. It first asserts that public information gets reflected in asset prices without delay. The COVID-19 pandemic presents an excellent example of how investor sentiment

and the difficulty of predicting the extent and severity of the resulting economic disruption can intensify market volatility. However, it is far from clear that systematic under-reaction or over-reaction to news presents an arbitrage opportunity promising traders extraordinary gains. It is this aspect of EMH that implies a second and in our view, the most fundamental tenet of the hypothesis: That is, in an efficient market, no arbitrage (gain) opportunities exist and we can see that playing out clearly not only in the Nigerian capital markets but responses across the global capital markets due to the Covid-19 pandemic.

Based on the conclusion, this study makes the following recommendations to our policy makers:

In a period of rapid turbulence like the Covid-19 pandemic, the market need to be insulated by the government through the regulators (Security and Exchange Commission [SEC]) by providing a hedging mechanism in order to reduce loss to investors.

The issue of securitization of shares should be enhanced and given prominence by the Nigerian capital market so as to make potential and intending investors bought and trade their share electronically from the comfort of their homes, in order to safeguard

their safety from getting infected with the Covid-19.

With the world being a global village, the Nigerian government needs to intensify efforts to vaccinate its people against the pandemic so as not have adverse effects of the virus in the near future that can derail the achievement so far recorded in the stock market and the economy at large

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