

Impact of Human Resource Accounting on Investment Decision in Nigeria

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Abstract

The contemporary issues surrounding human resources accounting has been well received in many disciplines, most especially in the field of management sciences. Human resources accounting is essentially the systematic accumulation of information about changes in investments made in human resources and reporting same back to management and all relevant stakeholder, in order to assist in making informed judgments that decision makers would otherwise not have made without such additional information. Given the importance of human resources management in contemporary times, this study seeks to assess the impact of human resource accounting on investment decision in Nigeria. By means of the ordinary least square (OLS) log-linear multiple regression model the study tested its formulated hypothesis that human resource accounting is highly significant to investors and requisite stakeholders in making informed investment decisions. More so, the inclusion of human resource accounting in financial reporting is desirable to aid the public in making rational decisions. The study therefore recommends that organization should enhance the retention of education and training of staff so as to avert wastage of knowledgeable investment and the company law should equally require companies to attach information about the value of human resource and the result of their performance during their accounting year

Keywords: Human resources accounting, Decision Making, Investment decision, Human Capital

INTRODUCTION

Over the years, human capital has long been recognized as a vital asset and value creator to enterprises. In contemporary times, expert posits that core competence, knowledge creation and innovation are primarily responsible for creating value over and above physical and financial resources. To develop a competitive advantage especially for emerging businesses and start-ups, it is important that firms truly leverage on the workforce as a competitive weapon. This is vital and important for employment generation and for economy recovery in developing economies such as Nigeria. A strategy for improving workforce productivity to drive higher value for the firms has become an important focus. Firms seek to optimize their workforce through comprehensive human capital development programs not only to achieve business goals but most important is for a long term survival and sustainability. To accomplish this undertaking, firms will need to invest resources to ensure that employees have the knowledge, skills, and competencies they need to work effectively in a rapidly changing and complex environment.

Mayo (2006) posits that people are often spoken of as assets, but are generally treated as cost because there is no credible system of valuing them. Fajana (2002) asserts that current accounting procedures deal

with human resources as expense rather than as investment. This is perhaps the essence of human resource accounting otherwise referred to as human capital accounting or human asset accounting. Fajana (2002) further posit that under conventional accounting system, utilization of money and materials are reported whereas, the value of human resources is seldom incorporated in financial statements. Human capital accounting relates to the quantification in monetary terms (such calculating capital value) of human resources employed by an organization. A well-developed system of human resource accounting could contribute significantly to internal decisions by management and external decisions by investors (Fajana, 2002).

Raghav (2011) also opines that human capital accounting helps potential investors judge a company better on the strength of human assets utilized. Thus, if two companies offer the same rate of return on capital employed, information on human resources can help investors decide which company to choose for investment. Until recently, the value of an enterprise as measured by the traditional balance sheet was viewed as sufficient reflection of the enterprise's assets. However, with the emergence of the knowledge-based economy the traditional valuation has been called to question, due to the recognition that human capital is an increasingly important part of an enterprise total value (Herman & Mitchell: 2008). Perhaps it was the realization of the short comings of the traditional balance sheet as a basis of business performance evaluation that led Kaplan and Norton (1992) to develop a framework that incorporates all qualitative and abstract measures of true importance of a firm, called the balanced scorecard. By focusing not only on financial outcomes but also on the human issues, the balanced scorecard helps provide a more comprehensive view of a business. This in turn helps organization to act in their best long-term interest. The financial objectives are therefore balanced with customer, process and employee perspectives. It is important to note that rapid technological change, increasing sophistication of customers and the importance of innovation have shifted the bases of competition for many businesses away from traditional physical and financial resources (Cuganesan, 2006). The challenge in contemporary times is to ensure that firms have capability to find, assimilate, compensate and retain human capital in the shape of talented individuals they need in order to drive a global organization that is both responsive to its customers. Similarly, firms seek the burgeoning opportunities of using their human resources together with technology for investment decisions, entrepreneurial breakthroughs that ultimately leads to economic recovery (Armstrong, 2006). In response to these changes, firms have embraced the notion of human capital has a good competitive advantage that will enhance their investment decisions, and as such human resource accounting has become a part of an overall effort to achieve cost-effective and investment decisions.

From the foregoing, the major challenges encountered in the recognition of human resources as an asset rest largely on its characteristics, quantification in monetary terms and the method of reporting. A number of pertinent questions have been brought to the fore in a bid to assess the impact of human resource accounting on investment decision. These questions revolve around the issues relating to an understanding of: the constraints in the application of human resource accounting by organizations for investment making decisions; the level of significance of the reporting of human resource value as asset in the statement of financial position of companies, and an identification of what the users of accounting information have to gain in this mode of reporting. Although there is a broad assumption that human capital has positive effects on firms' performance via investment and entrepreneurial decision making, the notion of performance for human capital remains largely untested. Hence, this study attempts to look into the connection between human resource accounting, investment and entrepreneurial decisions making of firms in an emerging country such as Nigeria. The main objective of this study therefore is to examine the impact of human resource accounting on investment decision. To achieve this objective, the null hypothesis stated below will be subsequently analysed.

H₀: Human resource accounting has no significant impact on investment decision of firms.

This study will be of immense value to bank regulators, investors, accountants, management, policy makers, academics, entrepreneurs and other relevant stakeholders, as it will provide deep insights into the value of benchmarking the performance of employees, against policy objectives of investment decisions, competition and going concern frameworks of firms. To a large extent, the study will be of immense benefit to all stakeholders in the private sector, as it would suggest ways on how to address or avoid conflict decision making.

2. LITERATURE REVIEW

Conceptual Framework

In the current business environment, human capital is regarded as a key source of competitive advantage. With the knowledge agenda, companies view their employees as an important resource and invest heavily in them. However, there is a general consensus that the value of human resources, or human capital, is usually adequately situated in terms of its conceptual framework, due to strict recognition criteria for intangible assets that do not allow human resources to be shown as an asset in the statement of financial position (Tayles, Pike & Sofian; 2007). Nevertheless, information on human capital and its development is the key underlying principle in understanding the concept of human capital, given its important to financial analysts and fund managers, who need to assess the future direction, potential and values of companies. Ishikawa and Ryan (2002) suggest that it is the stock of human capital that predominantly determines the conceptual framework of this vital phenomenon.

Human Resources Accounting and Decision Making

Human Resource Accounting involves accounting for expenditure related to human resources as assets as opposed to traditional accounting which treats these costs as expenditures that reduce profit. Fariborzand (2011) defines human resources accounting as, the identification, accumulation and dissemination of information about human resources in monetary terms. This suggests that, human resources accounting is the systematic accumulation of information about changes in investments made in human resources and reporting back that information to operating managers in order to assist them to make better decisions than they would have been able to make without such additional information. Raghav (2011) opines that human resources accounting is a method of measuring the effectiveness of personnel management activities and the use of people in an organization. Parameswaran and Jothi (2011) align their views with those of the American Accounting Association's definition of human resources accounting as, the measuring of data of human resources and communicating the information to the interested parties. Given the foregoing, human resource accounting is essentially the process of accounting for the value of people in an organization in order to enhance information for decision making by the users of financial information.

Similarly, Koontz and Weihrich (2010) define decision making as the selection of a course of action from among alternatives, implying that, decision making is at the core of planning. This suggests a plan cannot be said to exist unless a decision – a commitment of resources, direction, or reputation - has been made. Most of the times managers and entrepreneurs see decision – making as their central job because they must constantly choose what is to be done, who is to do it, when, where, and occasionally how to do it. Thus, decision making is a step in planning, even when such decisions are taken so quickly with little thought or when it influences actions only a few minutes, it is still part of planning. Decision making is a daily phenomenon in the life of entrepreneurship businesses and corporate organization, a course of action can seldom be judged alone because virtually every decision must be geared to other plans. In the views of Simon et al (1987), the work of managers, scientists, engineers, lawyers and the work that steers the course of society, and its governmental organization is largely work of making decisions and solving problems. Mosley, Pietri and Megginson (1996) on their own part view decision making as an exercise that individual and managers undertake in their daily activities to take advantage of opportunities and solve problems as they arise and they broadly classified decision making into programmed and non-

programmed decisions. Koontz and Weihrich (2010) put it more succinctly, when they opined that decision making is a process involving the following steps of premising, identifying alternatives, evaluating alternatives in terms of the goal sought and choosing an alternative that will best achieve the goal.

Empirical Literature

Since almost every literature on human resources points at people in organization as the greatest assets of organizations and this fact is also declared in most organizations' mission statements, annual reports and at companies annual general meetings (AGM), it therefore becomes imperative to look at the impact of human capital on decision making in firms in Nigeria. Human beings control and drive every other resources of an organization; hence the quality of decisions made by them reflects either directly or indirectly on the organization's performance. The study of Becker and Huselid (1997) as referred to by Kajola and Adedeji (2011), corroborated this assertion when they found a strong relationship between the quality of human capital and financial performance. In the study conducted by Okpala and Chidi (2010) they concluded that a well-developed system of human resource capital accounting could contribute significantly to internal decision by management and external decisions by investors. Information on investment and value of human resources is useful for decision making in the enterprise and as such, human capital accounting is highly significant to investor in making relevant investment decisions and the inclusion of human capital accounting in financial reporting is desirable to aid investors in making rational decisions. They also emphasized the need to address the issues of human capital development at both the micro and macro levels and that human capital value should be included in the statement of financial position of Nigeria organizations in order to aid investment decisions. Fariborz and Raiasheka (2011) in a study conducted on Iranian companies concluded that lack of Human Resources Accounting (HRA) disclosures in financial statements usually leads to obliquity of users. The study maintained that the use of HRA information in financial statement has incremental impact on individuals' decision-making process in order to stock investment statistically. It expressed the view that HRA information can play a critical role in internal managerial decision making and its measures can be used to show that investment in company's human resources may result in long-term profit for the company. Herman and Mitchel (2008) also opined that a comprehensive treatment of expected cost from human resource policies would provide external and internal financial analyst with different and useful information.

A study by Flamholtz, Bullen and Hua (2003), reported that human resource accounting provides the strategic level of management with an alternative accounting system designed to measure the cost and value of people to an organization. According to the study, HRA represents both a paradigm (a way of viewing human resource decisions and issues) and a set of measures of quantifying the effects of human resource management strategies upon the cost and value of people as organizational resource. They referred to other studies; Elias (1972), and Hendricks (1976), which found a significant association between HRA and decision making. In the study conducted by Keller (2009) on the effect of Management practices on the economic performance of firms, it was established that the outcome of the literature review demonstrated that management practices have a direct impact on firm performances. It also referred to the findings of Bloom and Van Reene (2007) which illuminates the correlation between management decisions and firm's economic performance. Specifically Bloom and Van Reene (2007) as cited by Keller (2009) were able to establish that management practices have a significant effect on the economic performances of family owned and operated firms as well as privately owned firms. Consequently, the inference from foregoing shows that; most firms recognizes the fact that human resources are assets that are germane to the success of the organization; Unlike the physical assets that are recognized in the financial statement human assets are not recognized in the financial statement; Human Capital theory supports the view that human capital is an important asset in organization; There exists a correlation between management decision and firm performance; and the lack of human resources information disclosure affects investors decisions.

Theoretical Discussion

This study considers two basic theories; the Human Capital Theory and the Decision Theory as the pillar on which the theoretical framework is predicated. This is because it is a given fact that the intellectual part of human beings drives an organization and equally constitute the assets in them and that the quality of this intellectual capital also determines the quality of investment making decision that are made at various levels of organization by employees who are the source of competitive advantage which ultimately reflects in corporate performances.

Human Capital Theory

The Human Capital theory proposed by Schultz (1961) and extensively developed by Becker (1964), has its roots from labour economics, a branch of economics that focuses on general work force in quantitative term. The theory contends that education and training raise the productivity of workers by imparting useful knowledge and skills, thus raising workers' future income as well, through increase in their lifetime earnings. The theory posits that expenditure on education, training and development is a costly exercise, and should be considered as investment since it is undertaken with a view to increasing personal incomes and enhancing the proficiency of employees. Human capital approach is essentially used to explain or support occupational wage differential and as such education, training and development would not only increase employee personal income, it would also serve as a means of achieving corporate competitive advantage which reflects ultimately in organizational performance; and if asset is considered as any expense which benefit is derived beyond one financial year, then it follows that expenses incurred in training and developing the human resources of an organization qualifies to be so called and treated in its books since the benefits from such costs usually last for many financial periods.

Flamholtz (1999) as noted by Baney and Wright (1997) opined that human capital theory distinguished between general skills and firm specific skills of human resources. General skills are those skills possessed by individuals which provide value to a firm and are transferable across a variety of firms. For instance, all competitor firms have the potential to accrue equal value by acquiring employees with knowledge of general management, the ability to apply financial ratios, or general cognitive ability. On the other hand, specific skills, provide value only to a particular firm, and such skill are of no value to competing firms. An instance of this is the knowledge of how to use a particular technology used only by one firm, or knowledge of a firms policies and procedures provided to that firm, but usually would not be valuable to other firms. The main relevance of this theory is that it considers the cost of education, training, development and even workers medical treatment as investments which are expected to reflect in increased or improved productivity of individual workers. Thus, if these are investments like other physical assets or non-current assets, considerable effort must be made to also reflect such value of human capital on the statement of financial position.

Decision Making Theory (Subjective Expected Utility Theory)

The decision making theory, otherwise called the Subjective Expected Utility (SEU) theory postulates that the quality of human capital available in organizations reflects the quality of decisions and choices made and such decisions ultimately influences organization performance. The development of subjective expected utility theory (SEU) was a major intellectual achievement which gave for the first time a formally axiomatic statement of what it would mean for an agent to behave in a consistent, rational manner. It assumed that a decision maker possessed a utility function which is an ordering of all possible outcomes of choices by preference, that all alternatives among which choice could be made were known, and the consequences of choosing each alternative could be ascertained (or in the version of the theory that treats choice under uncertainty, it assumed that a subjective or objective probability distribution of consequences was associated with each alternative). By applying subjectively assigned probabilities, SEU theory opened the way to fusing subjective opinions with objective data, an approach that can also be used in man machine decision-making systems. The assumption of SEU theory is very strong, permitting correspondingly strong inferences to be made from them. Although the assumptions cannot be satisfied even remotely for most complex situations in the real world, they may be satisfied approximately in some

microcosms – problem situations that can be isolated from the world’s complexity and dealt with independently.

METHODOLOGY

For the purpose of this study, the ordinary least square (OLS) log-linear multiple regression model is used to estimate the variables via data triangulation. This involves estimation of the model in order to examine the effect of human resource accounting on investment decisions. The linear estimation technique aims at achieving unique parameter estimates that would enable us to interpret the regression coefficients and consequently give a slightly better fit. The estimation was conducted using the econometric computer software package, E-Views version 7.0. Also an appropriate model with respect to the objective of the study was formulated. This is to theoretically establish the relationships between the variables; Employees, Training and Development, Human Resource Development fund, Retirement Benefits to analyze their impacts on return on investment (ROI) which is a proxy for investment decision of firms. The model specification is formulated to tests the hypothesis developed earlier in the study and they are as follows:

$$ROI = \beta_0 + \beta_1 TD + \mu_t \text{-----} 1$$

$$ROI = \beta_0 + \beta_2 HRDF + \mu_t \text{-----} 2$$

$$ROI = \beta_0 + \beta_3 RB + \mu_t \text{-----} 3$$

Where;

TD = Training and Development

HRDF = Human Resource Development fund

RB = Retirement Benefits

ROI = Investment decisions measured by return on investment (ROI)

RESULT AND DISCUSSION

The data presentation and analysis contains presentation of data, presentation of regression result, hypothesis testing and discussion of findings, in an attempt to analyze the relationship between the different variables involved in the analysis. To this effect, human resource accounting on investment decision of firms in Nigeria is evaluated using t-test statistical tool.

Statistical Test of Hypothesis

Using the *t*-test (*t*-statistic), a variable is statistically significant if t^* (*t*-calculated) is greater than the tabulated value of ± 1.96 under 95% (or 5%) confidence levels and it is statistically insignificant if the t^* is less than the tabulated value of ± 1.96 under 95 (or 5%) confidence levels. According, the t-test is defined as:

$$t = \frac{\rho}{\left(1 - \rho^2 / n - 2\right)^{\frac{1}{2}}}$$

That is;

$H_0: \beta_0 = 0$ (Null hypothesis)

$H_1: \beta_1 \neq 0$ (Alternative hypothesis)

Ho: Human resource accounting has no significant impact on investment decision of firms

Table 4.1: T-Test Result

| Test Value = 0 | | | | | |
|----------------|-----|-----------------|-----------------|---|--------|
| t-value | Df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | Lower | Upper |
| 2.368 | 219 | 0.000 | 2.18182 | 2.0003 | 2.3633 |

Source: Researchers Computation 2021 (E-Views 10.0)

The calculated t-value above is 2.36 and the tabulated value is 1.96 under 95% confidence levels. Since the calculated is greater than the tabulated value ($2.36 > 1.96$), the null hypothesis (H_0) is therefore rejected and it can be concluded that human resource accounting has an impact on investment decision of firms.

Discussion of findings

From the analysis, it could be observed that Human resource accounting has an impact on investment making decision of firms. This is because HRA views human resources as assets on investments which must be maintained for long-run productivity. The best use of HRA are used as a managerial tool to aid in making decisions that benefits the long-run strategic goals and profitability of the company for sound investment decision making. The development of human resource accounting is also positively influenced by the educational level of employees and their overall satisfaction. Therefore, development of human resource accounting has a direct impact on ROI of firms. Findings from this study are in agreement with the works of Becker and Huselid (1997); Kajola and Adedeji (2011) and Okpala and Chidi (2010), who all found a positive impact and strong relationship between the quality of human capital and investment decision of firms.

CONCLUSION AND RECOMMENDATIONS

This study set out to assess the impact of human resource accounting on investment decision of firms in Nigeria as well as the desirability of the inclusion of human resource accounting in financial reporting. HRA increases investment in firms because investors have the assurance of adequate use of their resources as a result of the value of human resource. Most importantly, human resource accounting gives shareholders and stakeholders adequate and sufficient information on the position of the organization which can also be used to determine the profitability and stability of such organization. From the findings of this study, it can be concluded that human resource accounting is highly significant to investors in making relevant investment decisions and that the inclusion of human resource accounting in financial reporting is desirable to aid investors in making rational decisions. With human resource accounting, management is well equipped to make effective and efficient decisions to move the organization forward. The study generally recommends the need to address the issues of human resource development and investment at both the micro and macro levels and that human capital value should be included in the statement of financial position of Nigerian firms to aid investment decisions. However, in more coincide terms, the study suggests that; management in organizations should consider the investment of HRA and change the traditional look for them as expenses in the statement of financial position. Accordingly, the amount of investment made in the Human Resources and its value can be utilized by the Human Resources management personnel to determine how far the investment in Human Resources is utilized by the management in producing income for the organization.

Closely related to the above is the recommendation that firms should enhance the retention of education and training on staff so as to avert wastage of knowledgeable investment. Accounting standard boards should equally incorporate their accounting standard for the valuation and disclosure of human resource accounting. Consequently, the company law should require companies to attach information about the value of human resource and the result of their performance during their accounting year in notes and schedule.

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Effect of Risk Management on Financial Performance of Listed Deposit Money Banks in Nigeria

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Abstract

The study examines the effect of risk management on financial performance of listed Deposit Money Banks in Nigeria. Risk Management was proxy with credit risk, liquidity risk, operational risk, capital risk and market risk, while financial performance was measured through net interest margin. In addition, control variables used are technology and bank leverage. Multiple regression technique was employed and Stata 13 adopted as tool for analysis of data. Data were collected FROM secondary sources and also through the annual financial reports and accounts of the bank, covering the period from 2007 to 2018. Robustness test conducted includes normality test of standard error, multicollinearity and heteroscedasticity to validate the results. The findings revealed that, risk management influences financial performance of listed deposit money banks in Nigeria however, while some elements of the risk management have positive effect, others have negative effect on financial performances. Specifically, credit risk, operational risk and market risk significantly predict the financial performance of banks while liquidity risk and capital adequacy risk are not major determinants of financial performances of deposit money banks in Nigeria based on the study. It is therefore recommended that management of deposit money banks should strengthen risk management of credit, operational and market risks in order to improve financial performances significantly.

Keywords: Finance Distress Theory, Risk Management and Net Interest Margin

INTRODUCTION

Risk management is still very much important and discussed in banking industry due to rising unstable economic environment. Risk according to Khan and Ahmed (2001), is an unforeseen and unclear impending event that could affect the achievement of organizational objectives. Given the challenging role the banks play in Nigeria's development, the regulatory body such as Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC) are confronted with finding a way out in management of diverse risks banks are exposed to and its implication to the financial system stability. Therefore, to ascertain the success or failure of any financial institution, their risk management strategy should be continually evaluated in relation to their profitability. Previous studies have identified various forms of

risks the banking sector is exposed to; credit risk, capital adequacy ratio, liquidity risk, operational risk, market risk, quality risk, compliance risk, political risk, regulatory risk, technological risk and reputational risk amongst others. However, this studies interest is on the management of credit risk, liquidity risk, operational risk, capitalrisk and market risk in relation to the financial performance of the banks. The going concern of banks make it imperative that they must continually earn and retain profit. However, to earn more profit highly depends on the efficient and effective management of associated risks in their business operations which is an indicator of good risk management. Banks in Nigeria are weak in productive use of funds which may be attributed to default culture, lack of sound entrepreneurs, business failure, un-favourable business climates, poor credit policies, government unstable economic policies amongst others (Noor, Das & Banik, 2018). The volatile nature, interdependent, interconnectedness and interrelatedness of the banking sector to other sector of the economy as the provider of funds are challenges faced by the banks making them exposed to high rate of non-performing loans, poor liquidity, operational inefficiency and non-optimal capital adequacy. The exposure to these risks could have significant negative effect on the performances of the banks if not well managed.

Industrial revolution needs effective and efficient policies and strategies to have an improved performance. The digital age or information and communication technology intensifies rivalry among businesses alike. The banking industry in Nigeria has been impacted through the introduction of technology (mobile banking, online banking, automated teller machine etc.) in its operation. This is to enable the banking industry catch up with the growing needs and dynamisms of businesses. Today, many customers do no longer go to branch offices of banks to make transaction because of the increase invention of machines and robots in banking operations which are regarded as more effective, efficient, faster and less costly in serving customers who prefer doing their transaction at the comfort of their homes or offices (Laucereno, 2019). It is believed that the invention and use of modern technology have improved the overall effectiveness and performances of the banks specifically. The practical problem that formed the motivation for the research is the tendency for high non-performing loans in the banks as being witnessed and also reported by the regulator (Central Bank of Nigeria). This suggests that poor risk management is fast becoming a key challenge to stakeholders in the Nigerian corporate setting (Farouk, 2014). Furthermore, the banking sector's challenges leading to the collapse of Savannah Bank, Oceanic Bank and Intercontinental Bank could be attributed to fraudulent financial reporting and high non-performing loans (Ibrahim, 2015). The implication of this is that there will be increased skepticisms in the mind of investors, shareholders and other stakeholders on the credibility of financial reports of companies in Nigeria. Also, despite the practice of good governance and compliance with Basel II and III in the banking sector; there are still increased reports of non-performing loans, low quality assets, non-optimal capital adequacy and poor liquidity level. As such, it is important to examine the effects of management of key risk items on financial performance of banks. In addition, there are few studies that have attempted to examine the effect of market risk on financial performance of banks most especially in developing countries like Nigeria. This study therefore examines market risk in addition to other risk management variables. The decision to focus on the deposit money banks (DMBs) stems from the fact that banks are one of the vibrant sectors that drives the Nigeria economy. There is, thus, the need for adequate focus on such sector. The major objective of the study is to examine the effect of risk management on financial performance of listed DMBs in Nigeria. We therefore hypothesized the objective in a null form that risk management has no significant effect on financial performance of listed Deposit Money Banks in Nigeria.

LITERATURE REVIEW

Conceptual Clarifications

Financial performance is the ability of a firm to make effective use of resources at its disposal in order to achieve the desired objective. Financial performance is defined as the outcome of how well assets of a firm are utilized to generate income (Etim, 2011). It is a yardstick applied to measure the financial health of a firm over a given period of time. It is also described as a measure of firm policies and operations in monetary terms and the result could be reflected on the firms return on assets (ROA), return on equity

(ROE) and sales growth. Financial performance is a subjective measure of how well a firm can use its assets for its primary mode of business to generate revenues (Shoukat& Nadeem, 2014 and Bagh et al. 2017). However, different measures are used to gauge financial performance such as return on equity, return on assets and capital employed (Shoukat& Nadeem, 2014 and Bagh et al. 2017). Financial Risk management is a process by which the identification as well as assessment of loss exposures faced by an entity and the adoption of best possible techniques and strategies to deal with these risk exposure (Rejda, 2011). Risk management is seen as an activity around project management which is speedily gaining relevance because all businesses are migrating towards globalization and due to increasing competition (Ahmed, Kayis&Amornsawadwatana, 2007). The process of risk management comprises of a several steps which establishes the context of identifying, treating, analyzing, monitoring, assessing and communicating risks for continuous enhancement in decision making. Risk management is characterized by identification, assessment as well as prioritization of risks in conjunction with the coordination and an economical application of available resources in order to minimize, control, and monitors the prospect or impact of unfortunate as well as unwanted events pertaining to a business (Bagh, Asif-Khan & Razzaq, 2017). Risk is often defined as a probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through preemptive action (Paulinus & Jones, 2017).

Empirical Literature

In reviewing existing work done in the subject of this research, for improvement in literature, Isah (2018) investigated the effect of credit risk management on the financial performance of commercial banks in Uganda and found that credit risk management impacts on the performance of commercial banks in Uganda. Muraina (2018) examined the influence of financial risk management on the profitability of banks in Nigeria covering the period from 2008 to 2016. The result revealed that credit risk has significant influence on banks' profitability. Nwude and Okeke (2018) analysis revealed that credit risk management has significant and positive effect on total loans and advances, the return on asset and return on equity of the banks. Kalu, Shieler and Amu (2018) also found that credit risk identification and appraisal have a strong and positive effect on financial performance of MDIs, while credit risk monitoring and mitigation have significant but moderate positive influence on financial performance of MDIs. Al-Sharif (2018) found that the credit risk has strong effect on financial performance of Jordanian Islamic banks. Al-Sharif (2018) found that liquidity risk has significant influence on the financial performance of Jordanian Islamic banks. Mohamed and Onyiego (2018) examined the effect of risk management on financial performance of commercial banks in Kenya and found that liquidity risk management significantly influences financial performance of commercial banks. Michael (2017) showed that liquidity risk has negative and significant impact on return on financial performance of banks in Ethiopia. Harelimana (2017) and Chipa and Wamiori (2017) findings show that the liquidity risk was one of the determinants of financial performance in Unguka bank Ltd. Wisdom, Muideen and Akindele (2018) record a positive relationship between risk management (liquidity) and financial performance of deposit money banks. Al-Sharif (2018) analysis show the most significant findings of the study to be presence of statistically significant effect of systemic banking risk (operational risk) on the performance of Jordanian Islamic banks. Mardiana, Puji and Dianata (2018) results revealed that the operating efficiency had negative and significant effect on financial performance of the banks proxy with return on assets. Rop and Rotich (2018) findings revealed significant relationships between financial performance of commercial State corporations and operational, financial and strategic risk management practices. The findings indicate strong positive effect of reputational risk management practices on financial performance.

Hamza (2017) examined the effect of credit risk management on performance of commercial banks in Pakistan and the findings revealed that capital adequacy ratio is positively influential on bank performance, while non-performing loan ratio records a significant but negative effect on financial performance. Shibiru and Mebratu (2017) findings showed liquidity ratio, non- performing loan ratio, and

capital adequacy ratio have a significant impact on financial performance of banks. Wijewardana and Wimalasiri (2017) study revealed that capital management risk has significant effect only on return on equity of commercial banks in Sri Lanka. Abdellahi, Mashkani and Hosseini (2017) investigated the impact of risk management (credit, market and liquidity) on financial performance. Their results showed that market risk had an insignificant impact on return on assets. Kiptisya (2017) findings revealed that the firm sets extensive budgeting systems to handle currency risk projections. It was also found that market risk affects return on assets and return on equity. Njoroge and Ngahu (2017) found that risk identification had significant relationships with the credit performance in FCB. Wanjohi, Wanjohi and Ndambiri (2017) result showed that Kenyan banks practicing good financial risk management were on the maximum and as such, financial risk management practices had a positive correlation to the financial performance of commercial banks in Kenya. Hussain, Ihsan and Hussain (2016) found significant association between risk management and financial performance. Shin (2017) examined the contribution of Information Technology on financial performance measured as ROA and ROE. The findings showed that Information Technology does not directly improve financial performance. Chaarani and El Abiad (2017) findings revealed that technological innovation, internet banking and investment in automated teller machines have positive effect on the financial performance of Lebanese banks. Farouk and Dandago (2015) findings showed that a significant relationship exists between Information Technology and financial performance, where investment in information technology on financial performance of banks were significant on return on assets, return on equity and earning per share.

Theoretical Discussion

Finance Distress Theory

The research used finance distress theory to underpin the study. Baldwin and Scott (1983) claimed that if a firm's business worsens to the extent where it can no longer meet up with its financial obligation as and when due, the firm could be said to have entered into state of financial distress. Financial distress is defined as the first year in which cash flows are less than current maturities' long-term debt (Whitaker, 1999). The major factor in recognizing firms in financial distress is their inability to also meet contractual debt obligations. Wruck (1990) argued that companies go into financial distress due to economic distress, performance decline and poor management especially on risks. In the case of commercial banks, inability to provide cash to depositors and loans to borrowers as and when demanded may constitute a liquidity crisis. Other creditors also need to be taken into account when firms are putting in place risk management measures. Credit risks in banks also need to be addressed since it may lead to financial distress. Loan portfolio management is an important determinant of the firm's liquidity. This theory provides for a non-biased perspective on the relationship between credit risk and financial performance used in the research. Through the provision of information that the effects of financial distress occur prior to default risk, the theory therefore offers a neutral ground to examine incisively the empirical investigation of the association within the listed deposit money banks in Nigeria.

METHODOLOGY

Ex-post facto research design is adopted for the study as it helps to determine the degree of effect of risk management on financial performance. The population of the study covers fifteen (15) commercial banks listed on the Nigerian Stock Exchange as at 31st December, 2018. All the fifteen listed commercial Banks in Nigeria as at 31st December, 2018 were used for the analysis. Secondary source of data collection was employed and data were obtained from Annual Reports and Accounts of the banks covering 2007 - 2018. The study adopts Multiple Regression Technique in addition to using Stata 13 as the study tool of analysis because the technique and tool give information on the time-ordering of events and they also allow for the control of individual unobserved heterogeneity. Robustness tests such as multicollinearity test, normality test, heteroscedasticity test, normality test of error term and hausman specification test were conducted.

Financial Performance (Net Interest Margin) is measured as net interest income minus net interest paid divided by net interest income. Credit risk measured as non-performing loans /total loans, liquidity risk measured as gross loans and advances /total deposits, operational risk measured as operating expenses /operating income, capital risk measured as capital/risk weighted assets, market risk measured as real interest rate, investment in technology measured as natural logarithm of total amount of investment in information and communication technology (ICT), Bank Leverage measured as total liabilities scaled by total Assets. The following equation forms the model specification of the study using Balanced Panel Multiple Regression. The equation is represented as given below:

$$NIM_{it} = \beta_{0it} + \beta_1 CR_{it} + \beta_2 LR_{it} + \beta_3 OR_{it} + \beta_4 CA_{it} + \beta_5 MR_{it} + \beta_6 TC_{it} + \beta_7 LV_{it} + \mu_{it} \dots\dots\dots (i)$$

Where: NIM = Net Interest Margin,
CR = Credit Risk,
LR = Liquidity Risk,
OR = Operational Risk,
CA = Capital Risk,
MR = Market Risk,
TC = Technology (Control Variable),
LV = Bank Leverage (Control Variable),
 $\beta_1, -\beta_7$ = Coefficient of explanatory variables,
 β_0 = Constant or Intercept,
 μ = Error Term,
it = Banks and Time

RESULT AND DISCUSSION

This detail entails the preliminary data analysis using descriptive statistics and correlation matrix. Robustness test conducted were also examined and analyzed. The descriptive statistics is presented in Table 1 showing the minimum, maximum, mean, standard deviation and Shapiro wilk.

Table 1: Descriptive Statistics

| Variables | Min | Max | Mean | Std. Dev. | Swilk |
|-----------|------|------|-------|-----------|---------|
| NIM | 0.02 | 9.64 | 2.249 | 1.249 | 0.00000 |
| CR | 0.04 | 56.9 | 5.027 | 7.440 | 0.00000 |
| LR | 1.01 | 78.1 | 15.15 | 13.15 | 0.00000 |
| OR | 33.8 | 93.7 | 71.15 | 11.74 | 0.00043 |
| CA | 0.52 | 30.9 | 14.60 | 5.698 | 0.00258 |
| MR | 15.1 | 18.9 | 16.90 | 0.883 | 0.00000 |
| TC | 13.8 | 17.9 | 15.93 | 0.756 | 0.14444 |
| LV | 68.9 | 99.4 | 85.15 | 5.788 | 0.00067 |

Source: Descriptive Statistic Results Using STATA 13

The minimum value for financial performance represented with net interest margin as shown in Table 1 was 0.02 while the maximum financial performance of the banks was 9.64 with a mean of 2.249. This implies that some banks within the study period recorded high net interest margin of 9.64% against other banks with as low as 0.02% net interest margin. Credit risk recorded a minimum value of 0.04 and

maximum value of 56.9 with a mean value of 5.02 implying that within the banking sector there were banks with non-performing loans as high as 56.9% of total loans against some other banks within the study period that recorded 0.04% of total loans as non-performing loans. Liquidity risk had a minimum value of 1.01, maximum value of 78.1 and mean of 15.15. This implies that the industry average liquidity during the study period was 15.15% and where some banks within the study held as high liquidity of 78.1%, some others held as low as 1.01% within the period. Operational risk had a minimum value of 33.8 and a maximum value of 93.7%. The industry average was 71.15% implying that on the average, the banks maintained 71.15% ratio of operating expenses to operating income. Capital risk recorded a minimum value of 0.52, maximum value of 30.9 and mean of 14.6. This implies that some banks within the study period held capital less than 1% of their risk weighted assets whereas, some others held capital as high as 30.9% of their risk weighted assets. Market risk represented with real interest rate has minimum and maximum values of 15.1 and 18.9 respectively with a mean value of 16.9. This means that the minimum amount of interest rate for the banks within the study period is 15.1%, while the maximum was 18% and the average was 16.9%.

Table 2: Correlation Analysis

| | NIM | CR | LR | OR | CA | MR | TC | LV |
|-----|---------|---------|---------|---------|---------|---------|--------|----|
| NIM | 1 | | | | | | | |
| CR | -.2006* | 1 | | | | | | |
| LR | 0.1086 | -0.0849 | 1 | | | | | |
| OR | -0.3847 | .4116* | -0.043 | 1 | | | | |
| CA | .2193* | -.2102* | .2866* | -0.1157 | 1 | | | |
| MR | -.4792* | .1762* | -0.0877 | .1635* | 0.0136 | 1 | | |
| TC | -.3799* | .2617* | -.2118* | .4011* | -.2477* | 0.0612 | 1 | |
| LV | -0.0793 | 0.1318 | 0.0035 | -0.0056 | -0.0599 | -0.1037 | 0.0083 | 1 |

Source: Correlation Matrix Results Using STATA 13

*. Correlation is significant at 0.01 or 0.05 level (2-tailed)

Table 2 shows that financial performance is negatively correlated with credit risk to the tune of negative 20%. This implies that financial performance has an inverse correlation with credit risk. Liquidity risk is found to have positive relationship with financial performance to the tune of about 11% implying a direct correlation between the two variables. Financial performance recorded a negative relationship with operational risk at a magnitude of 38%. This shows a correlation between the two variables in the different direction. Capital risk has a positive significant correlation with financial performance of banks in Nigeria at a magnitude of about 22%. Market risk has a negative but significant correlation with financial performance at a magnitude of about 48% implying an inverse relationship between market risk and financial performance. Financial performance was found to have a negative magnitude of relationship with the amount invested in information and communication technology at about 38%. This implies that financial performance and quantum of investment in technology moved inversely but at the same magnitude. Leverage of banks also has a negative and significant correlation with financial performance to the tune of about 8%.

Generally, the relationships among the independent variables of the study were mostly found to be insignificant. Therefore, on the overall variables, the Variance Inflation Factor (VIF) and tolerance values are used and were found to be consistently smaller than ten and one respectively, indicating an absence of multicollinearity. To further substantiate this position, the mean VIF of 1.15 was used and it indicates that multicollinearity is not a problem. Result obtained from the heteroscedasticity test shows chi-square values of (81.12) was large as its probability value less than 5%. This indicates that heteroskedasticity was present. This makes the interpretation of Ordinary Least Square (OLS) not suitable because of the violation of the classical assumptions of OLS. However, steps were taken to correct it by estimating a robust standard error and conducting a normality of the error term.

The normality of the error term was conducted using the kernel density estimate. It was found that the residual of the error term was tolerably mild. As such, average level of normality of the error term was attained. This necessitated the conduct and use of Generalized Least Square regression.

Table 3: Summary of Regression Result (Random Effect Model)

| Variables | Coefficient | Z-Statistics | Prob. Value | Cumulative Results |
|---------------------------|---------------|--------------|-------------|--------------------|
| Constant | 0.011464.27 | 0.000 | | |
| CR | -0.0011 -1.88 | 0.060 | | |
| LR | 0.0089 | 0.66 | 0.511 | |
| OR | -0.0514 -3.61 | 0.000 | | |
| CA | 0.0008 | 0.54 | 0.590 | |
| MR | -0.0005 -4.25 | 0.000 | | |
| TC | -0.0029 -2.38 | 0.017 | | |
| LV | -9.06e-06 | -0.35 | 0.729 | |
| R ² Within | | | | 0.2577 |
| R ² Between | | | | 0.3854 |
| R ² Overall | | | | 0.2978 |
| Wald Chi ² (7) | | | | 63.53 |
| Prob>Chi ² | | | | 0.0000 |

Source: Result output from STATA 13

The Summary of Regression Result of the parsimonious model of the study, followed by its interpretation, analysis and discussion of the results in respect of the individual and the cumulative results are stated in table 3 above. The cumulative R² overall of 0.2978 signifies that 19.78% of the total variation in financial performance of listed deposit money banks in Nigeria is accounted for by the risk management variables, technology and bank leverage used as control variables in the study. The Wald Chi² value of 63.53% which is significant at one percent indicates that risk management and financial performance model is fit. The P-value of 1% connotes that there is 99.9 percent probability that the relationship among the variables is not due to mere chance as such the independent variables reliably predict the dependent variable of the study. From Table 3, the z-value for credit risk (CR) was -1.88, while the coefficient value was -0.0011 which is significant at 10%. This means that credit risk has a significant and negative effect on financial performance of banks which implies that for every increase in banks' exposure to credit risk, the financial performance of listed deposit banks in Nigeria decreases. This finding is in line with those of Isah (2018), Muraina (2018) and Al-Sharif (2018). But it is contrary to those of Nwude and Okeke (2018) and Kalu, Shieler and Amu (2018).

Liquidity risk has a z-value of 0.66 and a coefficient value of 0.0089 which is neither significant at 1%, 5% nor at 10%. This indicates that liquidity risk has a positive but insignificant effect on financial performance of banks and thus connotes that an increase in the level of liquidity risk of deposit money banks in Nigeria, their financial performance increases in a small proportion. The operational risk recorded a t-value of -3.61 and a coefficient value of -0.0514 which is significant at 1% level. This shows that operational risk has a significant but negative effect on financial performance of deposit money banks in Nigeria and thus means that an increase in the level of operational risk decreases the level of financial performance significantly. Capital risk has a t-value of 0.54 and a coefficient value of 0.0008 which is not significant at 5% level. This shows that the capital risk has insignificantly impacted on the financial performance of deposit money banks in Nigeria. This means that increased capital ratio to risk assets, increases financial performance of banks insignificantly. This finding is in line with those of

Hamza (2017) and Bagh, Asif-Khan and Razzaq (2017). However, it is in contrast to those of Shibiru and Mebratu (2017), Hussain, Ihsan and Hussain (2016) and Wijewardana and Wimalasiri (2017). Market risk has a t-value of -4.25 and a coefficient value of -0.0005 with a significant value of 1% level. This connotes that market risk has negative and strong effect on financial performance of deposit money banks in Nigeria. This however, means that an increase in real interest rate, significantly decrease the level of financial performance. This finding is in line with the study of Kiptisya (2017). However, Abdellahi, Mashkani and Hosseini (2017) and Li (2018) studies were contrary to this study.

CONCLUSION AND RECOMMENDATIONS

From the results, analysis, interpretation and discussions in section four, the study concludes that risk management influences financial performance of listed deposit money banks in Nigeria but while some elements of the risk management have positive effect, others have negative effect on financial performance. Specifically, credit risk, operational risk and market risk significantly predict the financial performance of banks while liquidity risk and capital adequacy risk are not major determinants of financial performances of deposit money banks based on the study result. In line with the conclusion, the study recommends that management of deposit money banks should strengthen risk management of credit, operational and market risks in order to improve financial performances significantly.

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Impact of Macro-Economic Policy on Manufacturing Sector Output in Nigeria

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Abstract

The systematic changes in the area of leadership style to boost family businesses has created an array of new family business opportunities than challenges. It is worth noting that leadership style has been observed as one of the most important factor in ensuring performance of family business. Therefore, success of all organizations be it private, government, non-governmental, profit and non-profit making organizations, to an extent depend on the leadership style. The study examines the effect of leadership style on the performance of family businesses in North Central Nigeria. The study adopted a survey research design. The population of the family businesses (FBs) in this study was 6,994,578 in North Central Nigeria. The study used Taro Yamane's formula to determine the sample size of 399 owners of family businesses in North Central, Nigeria. The method of data collection used in this study was a primary data by administering questionnaires to the consented respondents. The statistical tool used is multiple regression. The findings revealed that leadership style has a significant effect on the performance of family businesses in North Central, Nigeria. Other findings were that transactional leadership style has a negative and significant effect on the performance of family business in North Central, Nigeria and charismatic leadership style was found to have positive and significant effect on the performance of family businesses in North Central Nigeria. Therefore, the study recommends that family business owners in the North Central should continue to maintain and use charismatic style to improve their businesses as it was proven to motivate and encourage employees to give in their best on the job because of the leader. Also, less of transactional leadership style should be adopted as this style puts the employees away, thereby making performance of the family business to be stagnant.

Keywords: Transactional, Charismatic Leadership Style and Family Businesses

INTRODUCTION

In free market economies like Nigeria and other developed and developing nations, the contribution of private individuals and business is invaluable. These businesses contribute immensely to the Gross Domestic Product (GDP) of nations and generate millions of jobs for the unemployed. The use of transactional, charismatic leadership style over the years by owners of family businesses, has proven to be effective in terms of performance oriented. These various leadership styles for example transactional has helped put some business managers in full command even though the employees may not like it at the beginning, but if the leader is true to himself, it sets the business for the right goal. Furthermore, charismatic leadership style also puts family business in a proper shape for performance because the employees work to get the best result so as to please their charismatic leader. In line with these, family businesses have their place in history in Nigeria and North Central in particular as they have existed for a very long time hence, regarded as the oldest form of business. To this end, in virtually every country of the world, private indigenous enterprises are seen as an engine of growth and are among the most important contributors to wealth and employment creation (Sharma, 2015; Ward, 2004). In Nigeria for example, Oyeyinka (2010) states that private indigenous enterprises employ more than 50% of the private sector workforce. Accordingly, leadership style has been observed as one of the most important factor in ensuring performance of family business. Leadership style plays a vital role in today's businesses. Success of all organizations, be it private, government, non-governmental, profit and non-profit making organizations, to an extent depend on the leadership style. Leadership style of any organization especially

family business, influences the success and failure of achieving the objectives and goals of such organization. In the society, today leadership style is practiced among the education sector, industries, business enterprises, civil and military organizations and in every work of life. Leadership style in an organization can promote unity, strength, prosperity, continuity and happiness of employees' performance in an organization (Yusuf & Yusuf, 2017).

Furthermore, the role of leadership in an organization is crucial in terms of creating a vision, mission, determination and establishment of objectives, designing strategies, policies, and methods to achieve the organizational objectives effectively and efficiently (Xu & Wang, 2008). Leadership style affects family businesses and their performance because leaders determine values, culture, tolerance for change, and motivation for employees. Leadership style helps shape the business approaches, including their efficacy and implementation. According to Igbaekemen and Odirvri, (2015), leadership styles could be seen at any organizational level and are not exclusive to management (Igbaekemen & Odirvri, 2015). It is seen as a specific behaviour employed by a leader in a company to empower staff to achieve the organization's set of goals. Leadership style is the manner in which a director or boss wants to behave with his or her staff or colleagues and the manner in which they exercise the leadership role (Xenikou, 2017). Family businesses are recognized as the oldest form of businesses in Nigeria. However, despite their place as the oldest and making major contributions to the economy in North Central Nigeria, their survival rate appears to be appalling as only a handful of them survive more than one generation. There are large number of Family business (FBs) in North Central Nigeria that have either closed businesses or struggling to remain in business. It is on this forgoing problem that this study sets out to examine the effect of leadership style on the performance of family businesses in North Central Nigeria. The general objective of this study was to examine the effect of leadership style on the performance of family businesses in North Central Nigeria. Other specific objectives include: To evaluate the effect of Transactional leadership style on the performance of family businesses in North Central Nigeria and to evaluate the effect of charismatic leadership style on the performance of family businesses in North Central Nigeria. In line with the objective of the study the following hypotheses are stated in a null form, they are:

Ho₁: Transactional Leadership Style has no significant effect on the performance of family businesses in North Central Nigeria

Ho₂: Charismatic Leadership Style has no significant effect on the performance of family businesses in North Central Nigeria

LITERATURE REVIEW

Concept of Leadership Style

Leaders play essential role in accomplishment of goals and boost employees' performance by satisfying them with their jobs. Leadership style is a vital issue in every organization primarily because the decisions made by the leaders could lead to success or business failure (Tom et al., 2014). According to Osabiya and Ikenga (2015), leadership style could be seen as act of persuasion where a leader acts as a case study for a group of employees in order to motivate them or influence the members of the group to pursue the objectives of the organization. Leadership style is a combination of different characteristics, traits and behaviours that are used by leaders for interacting with their subordinates. (Mitonga-Monga & Coetzee, 2012). However, Mitonga-Monga and Coetzee (2012) consider leadership as the pattern associated with managerial behavior, which is designed to integrate the organizational or personal interest and effects for achieving particular objectives. Harris et al (2007) also postulated that leadership style can be defined as the kind of relationship that is used by an individual so as to make people work together for a common goal or objective. According to modern leadership styles, leadership styles can be categorized as follows; transformational leadership style; transactional leadership style; culture-based leadership; charismatic leadership, and; visionary leadership (Harris, et al., 2007). Hence, the focus of this study is on two modern leadership styles namely; Transactional leadership style and Charismatic leadership style.

Transactional Leadership Style

This is described by the contractual relationship that exists between the leader and subordinates, which depends on their individual advantages (Winkler, 2010). This type of leadership is noted for its deployment of the carrot and stick method to accomplish organizational goals (Bass, 1997). This indicates that employees are remunerated based on the accomplishment of their tasks and, to avoid punishment, make sure that the leader's requirements are also accomplished (Aarons, 2006). Transactional leadership is a leadership style where the leaders lead the followers via punishment and reward (Robbins, Judge, & Hasham, 2009) for the completion of certain tasks (Bass and Avolio, 1997). Transactional leaders guide and motivate their followers to achieve goals by clarifying roles and task requirements (Robbins & Judge, 2017). Transactional leaders may result in follower's compliance, but unlikely to generate commitment to task objectives (Nam and Mohammad, 2011). The transactional leader and followers are more towards temporary negotiation process, and it hinders the employees' innovative and creative skills (Dai et al., 2013). However, transactional leadership were also linked to positive outcomes in the organization (Afshari & Gibson, 2016) and in some cases, transactional leadership were found to have strong impact on employee outcomes (Podsakoff et al. 2006), thus, transactional leadership style should be taken into account of its contribution towards positive employees' behavior and organization outcome.

As indicated by Avolio and Bass (2004), transactional leadership comprises three elements: contingent reward, active management by exception, and passive management by exception. The contingent reward has to do with the leader establishing the objectives and performance expectations to his or her followers, along with the use of rewards and promotions as an inducement to get them to achieve desired results (Akram, Lei, Hussain, Haider, & Akram, 2016). Active management by exception refers to continuous monitoring by the leader to ensure that tasks are executed, problems are found and solved, and procedures are reinforced (Gill, 2012). This implies that the leader is vigilant in the activities engaged in by their followers. Passive management by exception is evidenced when leaders are receptive, and they respond to problems only when they arise. These leaders react to issues just when they emerge (Yahaya & Ebrahim, 2016). The major problem with this type of leadership is the expectation. Hence, transactional leadership can be defined as the exchange of targets and rewards between the management and the employees (Ojokuku, et al., 2012). The study by Longe, (2014) revealed that transactional leadership style has a positive impact on the organizational performance. The transactional leadership style helps in creating as well as sustaining the context in which organizational and human capabilities are maximized as the employees are always able to achieve the tangible and intangible rewards. This leadership style particularly helps in creating an environment that is optimal for performance and also articulates the compelling vision that enhances the overall firm performance (Longe, 2014). According to the research conducted by Sofi and Devanadhen (2015), transactional leadership was not found to have a direct impact on the performance of the organization. This leadership style does not encourage creativity and innovation among the employees and hence, the employees do not perform as per the expectations of the organization.

Charismatic Leadership Style

Charismatic leadership is considered to be one of the most successful leadership styles, where the charismatic leaders develop a vision and the followers are asked to follow and execute the vision. The charismatic leadership invites innovation and creativity and is considered to be motivational for the employees. But the major drawback of this style of leadership is that the followers are totally dependent on the leader and once the leader leaves the organization, they become direction-less. The problem worsens as charismatic leaders do not train their subordinates to act as their replacements in the future. This leadership style results in "happy followers, but few future leaders". Thus, it can have a long -term negative effect on the organizational performance (Germano, 2010). Ojukuku et al (2012) also stated similar results through their research. They conducted a quantitative research on the employees of twenty banks based in Nigeria through a survey questionnaire. The findings of their research suggested that the charismatic leadership bears a negative relationship with the organizational leadership. It does not

motivate and induce the employees enough to retrieve the expected performances out of them (Ojokuku, et al., 2012). The charismatic leader leads by infusing energy and eagerness into their team members. A charismatic leader is someone who is often on the run. He is not someone who feels pleased with any type of stationary situation. The researcher sees charismatic leadership style as one which relies on the persuasiveness of the leader, their strong belief in their goal and the ability to make their teams (or followers) feel the same way. When charismatic leaders speak, they are able to motivate, inspire and get people to accomplish the task at hand. This is a leader that is actively involved in organizational goals and objectives.

Concept of Family Business

One definition holds that family business (FB) enterprises are controlled by members of the same family, and policy is determined and ownership is dominated by members of the same kingship group (Barbara & Alberto Ivo, 2009). Buttressing this point, Suh et.al, (2008) pointed out that there are definition difficulties in FB definition but it could be defined using some of the following criteria; voting control, percentage of ownership, power over strategic direction, involvement of multiple generations, and active management by family members. Thus, Cabrera-Suarez (2005), opines that FB can be defined as a business in which the family has influence or control over both the ownership and management operations. To Allouche and Amann (2008), a family business is a business in which one or several families significantly influence its development through ownership of its capital, placing the emphasis on family ties with regard to the process of selecting company directors, whether they are family members or workers recruited externally, and expressing a desire to transmit the business to the next generation while understanding the importance of the business for the interests and objectives of the family.

Concept of Performance

Performance comprises of the results of an organization or the actual outputs of an organization, which can be measured against intended outputs, goals and objectives. Performance in organizations focuses attention on what makes, identifies and communicates the drivers of success, support organization's learning and provide a basis for assessment and reward (Brown, 1996). According to Dixon (1990), a firm's performance is central to the future well-being and prosperity of any enterprise. According to Richard and Devinney (2009) firm performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). On the other hand, performance is an essential indicator of the organisational success and competitive advantage of firms. If firms are able to identify the factors that determine improved performance, they could take advantage of their specific features.

Empirical Review

Yahchouchi (2009) in his study observed that Lebanese leadership style was assumed to be transactional, and that the leadership style had positive relationships and affected employees' commitment (performance). The study observes that there were no significant differences between male and female respondents on transactional leadership styles. However, a significant difference exists between Muslim and Christian societies. This means that there are factors such as religion, culture, and environmental setting that may account for the adoption and application of a particular leadership style to elicit employees' commitment. The knowledge of these factors will enhance the understanding of managerial practices and leadership styles that will affect employees' organizational performance within a particular context. In the Nigerian context, studies on examining the relationship between leadership styles and firm performance seem to be under-researched. A study by Othman et al. (2013) revealed that charismatic leadership style has a positive relationship with firm performance among Nigerian public university lecturers. The study disclosed that enthusiasm, recognizing accomplishments, providing direction, and

encouraging creativity offered by the leadership among Nigerian public universities to account for the variation of Nigerian public university lecturers in their commitment to stay and continue to work in Nigerian public universities.

In a related study conducted in Ibadan, Fasola et al. (2013) revealed that, transactional leadership has a positive relationship with the performance of banking employees in Nigeria. The study observed that transactional leadership styles, was seen to be effective because it helps to induce employees' commitment for overall firm performance. The study concluded that the relationship between leadership styles and firm performance in one organization may differ from another organization. As a result, there is a need for leaders and managers to take note of their organization's peculiarities. In the same vein, Okonkwo et al. (2015) study perceived leadership styles as predictors of employees' commitment showing that perceived leadership styles would jointly and independently predict firm performance. However, leadership styles such as transactional and charismatic did not predict the firm performance significantly. Abasilim et al. (2018) in a study on the canonical analysis between the perceived leadership styles and employees' commitment in Nigeria found out that a negative relationship exists between transactional and charismatic leadership styles and firm performance in the study context. The study concluded that firm performance can be said to have been achieved, when the appropriate leadership style that engenders employees' commitment has been identified. Abasilim et al., (2019), examines the relationship between transactional leadership style and firm performance in Lagos State Civil Service Commission of Nigeria. The survey data were collected from the employees of the organization, and the Statistical Package for Social Sciences (SPSS) version 22.0 was used for the statistical analysis. The results show that transactional leadership style shows an insignificant small negative relationship with firm performance. The study, therefore, recommends that firm performance is more likely to be achieved when the appropriate leadership style is adopted in Lagos State Civil Service Commission of Nigeria.

Theoretical Framework

Resource based Theory

The familiness concept is drawn from the Resource-based view (RBV) theory of the firm which states that the performance of firms can best be analysed through the heterogeneous nature of its internal resources (Peteraf1993). This seeks to answer the question of why some firms perform better than the others. It is an economic tool used to determine the strategic resources available to a firm (Barney,1991). The RBV has been and still remains the most widely used theory to guide family business research. The framework of this theory developed by Barney (1991) has two underlying assumptions. First is that, a firm's resources can be referred to as a bundle of productive resources, if they are heterogeneous. This implies that the firm's resources must be diverse in nature for them to lead to any form of competitive advantage; and second, a firm's resources must not be perfectly mobile, which suggests that they must be inelastic in supply and not easily copied. Under the discussion on RBV, a firm's resources that have the potential to impact positively on organisational outcome and create competitive advantages for that organisation must have four characteristics: • it must be valuable- this implies that the resource must be able to influence the firm's effectiveness and efficiency in a positive way • it must be unique and only available to the firm • it must be inimitable – this means that for the resource to create a sustainable competitive advantage, competitors must not be able to copy it; and lastly, • it must be non-substitutable- this implies that the resource cannot be substituted by a competitor. It is only then that it can secure the strategy of the firm.

METHODOLOGY

The study adopted the survey research design and this is because the information or data needed for the study required the use of structured questionnaire that was administered to the respondents who are the owners or MDs of the family businesses in the North Central zone of Nigeria. Also, the population of the study consist of all the registered family businesses in the North Central of Nigeria. According to Small and Medium Enterprises Development Agency Nigeria (SMEDAN) and National Bureau of Statistics

(NBS) (2017) collaborative survey, there are 6,994,578. registered family businesses in North Central, Nigeria. The population of the family businesses in the North Central is listed in the table below as follows:

Table 1.1 Registered Family Businesses in North Central, Nigeria

| STATE | FB |
|-------------|------------|
| ABUJA (FCT) | 1,482,365 |
| BENUE | 1,037,998 |
| KOGI | 735,657 |
| KWARA | 1,245,811 |
| NASARAWA | 382954 |
| NIGER | 977,240 |
| PLATEAU | 1,132, 553 |
| TOTAL | 6,994,578 |

Source: SMEDAN & NBS Survey (2017)

Thus, the population of family business) in this study is 6994578 in North Central Nigeria and this was reduced using the Taro Yamane (1967) formula as stated below:

$$n = N / 1 + N(e)^2$$

Where N is the population size

e is the margin error (assume 5%)

l= constant

$$e = 0.05$$

$$n = 6994578 / 1 + 6994578(0.05)^2$$

$$n = 6994578 / 1 + 6994578(0.0025)$$

$$n = 6994578 / 1 + 17486.445$$

$$n = 6994578 / 17487.445$$

$$n = 399.9 \text{ or } 400$$

Therefore, the sample size of the study is 400 of the family businesses in North Central Nigeria. Furthermore, the study used a stratified sampling technique in selecting the 400 from 6994578 family businesses in North Central, Nigeria. The researcher used Bournley's appropriation formula in selecting sample in each of the states of the North Central Zone and these are:

Table 1.2 Proportion of Family Businesses in North Central, Nigeria

| STATE | Population | Proportion | Sample |
|-------------|------------|-----------------------------|--------|
| ABUJA (FCT) | 1482365 | $1482365x$ $400/6994578$ | 84 |
| BENUE | 1037998 | $1037998x$ $400/6994578$ | 59 |
| KOGI | 735657 | $735657x$ $400/6994578$ | 42 |
| KWARA | 1245811 | $1245811x$ $400/6994578$ | 71 |

| | | | |
|----------|---------|-------------------------|-----|
| NASARAWA | 382954 | 382954x 400/6994578 | 22 |
| NIGER | 977240 | 977240x 400/6994578 | 56 |
| PLATEAU | 1132553 | 1132553x 400/6994578 | 65 |
| TOTAL | 6994578 | - | 400 |

Source: Researchers Computation (2021)

From the above table 1.2 the sample size for each of the states in the North central zone to apportion copies of questionnaires each as it appears on the proportion index. For example, Abuja has the highest number of family businesses population in the North Central of 1482365 and after the proportion applied, it received a total of 84 copies of questionnaires that was administered to the family business operators in Abuja. The same was applied to other six states in the North Central zone. In line with the above, the method of data collection was questionnaire administered to the respondents. The reason for using primary sources of data is that, it is crucial in presenting a study of this nature and other research data that is based on original data produced by the respondents that are actually involved in the subject area of research. It was designed in a five (5) point Likert type scale questionnaire to collect data from the respondents. The question provides information on the effect of leadership style on the performance of family businesses in North Central Nigeria. Finally, the study used multiple regression method to determine the effect of the independent variable on the dependent variable. The ordinary least squares method is one of the most popular and widely used methods for regression analysis. The SPSS software of 23.0 was used for this study. The statistical test of parameter estimates was conducted using their standard error, t-test, F-test, R, and R². The economic criteria showed whether the coefficients of the variable conform to the economic a priori expectation, while the statistical criteria test was used to assess the significance of the overall regression.

$$Y = \alpha + \beta_1 x$$

Where y = dependent variable, α = intercept, β_1 is coefficient and x is the independent variable. However, the above model is expressed as:

$$PFB = \alpha + \beta_1 TRS + \beta_2 CHA + \mu \dots \text{equation 1}$$

Where: PFB = Performance of family businesses (measured as effectiveness) , β = Coefficient, α = Intercept, μ = Error terms, TRS= Transactional Leadership Style and CHA= Charismatic Leadership Style

RESULT AND DISCUSSION

Table 2: Assessment of Transactional Leadership Style

| Items | 5 | 4 | 3 | 2 | 1 |
|--|------------|------------|-----------|------------|-----------|
| Owners of the family businesses in the North Central zone of Nigeria always used transactional style to operate their business perfectly | 79(19.79) | 69(17.19) | 58(14.32) | 115(29.17) | 78(19.53) |
| The use of Transactional style increases the performance of doing business within the family in the North Central Zone of Nigeria | 123(31.25) | 122(30.99) | 46(11.20) | 43(10.16) | 65(16.41) |
| Transactional style makes subordinates of family businesses to be preoccupied with rules and procedures in North Central Nigeria | 113(28.65) | 106(26.82) | 54(13.28) | 48(11.20) | 80(20.05) |

Source: Survey, 2021

Table 2 presents data from responses as it was discovered that majority of the respondents strongly agreed (19.79%) and agreed (17.19%) to the statement that owners of the family businesses in the North Central zone of Nigeria always used transactional style to operate their business perfectly. 29.17% strongly disagreed and 19.53% disagreed with the said statement while only 14.32% were undecided. Also, the table showed that the majority of the respondents, 31.25% and 30.99% strongly agreed and agreed respectively that the use of transactional style increases the performance of doing business within the family in the North Central Zone of Nigeria. 10.16% and 16.41% strongly disagreed and disagreed respectively, while only 11.20% were undecided. From the table also, the majority of the respondents 28.65% and 26.82% strongly agreed and agreed respectively that transactional style makes subordinates of family businesses to be preoccupied with rules and procedures in North Central Nigeria. 11.20% and 20.05% strongly disagreed and disagreed respectively, while 13.28% were undecided.

Table 3: Mean of Transactional Leadership Style

| Variables | 5 | 4 | 3 | 2 | 1 | FX | N | Mean | Remarks | Ranking | Sectorial mean |
|--------------------|---------|---------|----|---------|----|------|-----|------|---------|-----------------|----------------|
| Takes all decision | 79 | 69 | 58 | 11 5 | 78 | 1153 | 399 | 2.89 | Low | 3 rd | 3.23 |
| Absence of input | 12 3 | 12 2 | 46 | 43 | 65 | 1392 | 399 | 3.48 | High | 1 st | |
| Coerce | 11 3 | 10 6 | 54 | 48 | 80 | 1327 | 399 | 3.33 | High | 2 nd | |

Author Computation, 2021

The above table shows that transactional leadership style in terms of performance of family business through, takes all decisions, absence of inputs and coerce was ranked third, first and second respectively. This implies that family businesses in the North Central zone of Nigeria uses transactional leadership style for their businesses to perform well.

Table 4: Assessment of Charismatic Leadership Style

| Items | 5 | 4 | 3 | 2 | 1 |
|---|----------------|----------------|---------------|-----------|-----------|
| Employees' frequently have emotional attachment to their charismatic leader in family businesses in North Central Nigeria | 125(32.03) | 123(31.25) | 37(8.85) | 62(15.36) | 51(12.50) |
| The charismatic leader reduce dependence on him among family business owners in North Central Nigeria | 147(37.50) | 112(28.39) | 47(11.4 6) | 59(14.58) | 34(8.07) |
| Employees' of family business in North Central Nigeria have a good obligation and personal values to remain in the family business. | 113(28.65) | 122(30.99) | 45(10.9 4) | 37(8.85) | 82(20.57) |

Source: Survey, 2021

From the above table, it was discovered that majority of the respondents strongly agreed (32.03%) and agreed (31.25%) to the statement that employees' frequently have emotional attachment to their charismatic leader in family businesses in North Central Nigeria. 15.36% strongly disagreed and 12.50% disagreed with the said statement while only 8.36% were undecided. It was also observed that the majority of the respondents, 37.50% and 28.39% strongly agreed and agreed respectively that charismatic leader reduce dependence on him among family business owners in North Central Nigeria. 14.58% and 8.07% strongly disagreed and disagreed respectively, while only 11.46% were undecided. From the table

also, the majority of the respondents 28.65% and 30.99% strongly agreed and agreed respectively that employees of family business in North Central Nigeria have a good obligation and personal values to remain in the family business. 8.85% and 20.57% strongly disagreed and disagreed respectively, while 10.94% were undecided.

Table 5: Mean of Charismatic Leadership Style

| Variables | 5 | 4 | 3 | 2 | 1 | FX | N | Mean | Remarks | Ranking | Sectorial mean |
|------------------------------------|-----|-----|----|----|----|------|-----|------|---------|-----------------|----------------|
| Emotional attachment | 125 | 123 | 37 | 62 | 51 | 1403 | 399 | 3.51 | High | 2 nd | 3.53 |
| Dependency on the leader | 145 | 112 | 47 | 59 | 34 | 1493 | 399 | 3.74 | High | 1 st | |
| Good obligation and personal value | 113 | 121 | 45 | 37 | 82 | 1340 | 399 | 3.36 | High | 3 rd | |

Author Computation, 2021

Table 5 shows that charismatic leadership style in terms of emotional attachment was ranked second, while dependency on the leader was ranked first and good obligation and personal values was third ranked. This implies that owners of family businesses in the North Central zone of Nigeria are used to charismatic leadership style.

Table 6: Assessment of Performance.

| Items | 5 | 4 | 3 | 2 | 1 |
|---|-------------|-------------|-----------|-----------|-----------|
| Family businesses in North Central Nigeria frequently utilize their input to increase production | 115(29.17) | 101(25.52) | 52(12.78) | 37(8.85) | 94(23.70) |
| Family businesses in North Central Nigeria always realised effective output in production | 121(30.73) | 132(33.59) | 52(12.76) | 53(13.02) | 41(9.90) |
| Family businesses in North Central Nigeria careful manage the organization available resources to increase the quantity of products | 114(28.91) | 132(33.59) | 64(15.89) | 48(11.72) | 41(9.90) |

Source: Survey, 2021

From the above table, it was discovered that majority of the respondents strongly agreed (29.17%) and agreed (25.25%) to the statement that family businesses in North Central Nigeria frequently utilize their input to increase production. 8.85% strongly disagreed and 23.70% disagreed with the said statement while only 12.78% were undecided.

It was also observed that the majority of the respondents, 30.73% and 33.59% strongly agreed and agreed respectively that family businesses in North Central Nigeria always realised effective output in production. 13.02% and 9.90% strongly disagreed and disagreed respectively, while only 12.76% were undecided. From the table also, the majority of the respondents 28.91% and 33.59% strongly agreed and agreed respectively that family businesses in North Central Nigeria careful manage the organization available resources to increase the quantity of products. 11.72% and 9.90% strongly disagreed and disagreed respectively, while 15.89% were undecided.

Table 7: Mean of Performance.

| Variables | 5 | 4 | 3 | 2 | 1 | FX | N | Mean | Remarks | Ranking | Sectorial mean |
|--------------------|-----|-----|----|----|----|------|-----|------|---------|-----------------|----------------|
| Input | 93 | 123 | 60 | 70 | 53 | 1330 | 399 | 3.33 | High | 3 rd | 3.50 |
| Increase in output | 114 | 124 | 75 | 47 | 39 | 1424 | 399 | 3.57 | High | 1 st | |
| Decline in output | 104 | 117 | 67 | 42 | 69 | 1342 | 399 | 3.36 | High | 2 nd | |

Author Computation, 2021

The above table shows that performance in terms of effectiveness (increase in output, input and decline in output) which was ranked first, second and third ranked. This implies that there is effective utilization of input, and increase in output but no decline in output.

Table 8: Descriptive Statistics

| Descriptive Statistics | | | | | |
|------------------------|-----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| PFB | 399 | 1.00 | 5.00 | 3.1733 | 1.41544 |
| TRS | 399 | 1.00 | 5.00 | 3.3897 | 1.41431 |
| CHA | 399 | 1.00 | 5.00 | 3.5990 | 1.41996 |
| Valid N (listwise) | 399 | | | | |

Source SPSS version 23.

The table 8 revealed that the result of descriptive statistics which indicated the mean and standard deviation as well as the minimum and maximum value of the variables. The mean value of performance of family business in terms of effectiveness (PFB) is 3.17, Transactional leadership (TRS) is 3.38, the mean value of charismatic leadership (CHA) is 3.59. The table also recorded the standard deviation of the variables.

Table 9: Regression Analysis

| Model Summary | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .865 ^a | 0.748 | .923 | .42080 |

a. Predictors: (Constant), TRS, CHA

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|----------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 789.870 | 2 | 349.935 | 1976.255 | .000 ^b |
| | Residual | 65.464 | 396 | .177 | | |
| | Total | 855.334 | 398 | | | |

a. Dependent Variable: PFB

b. Predictors: (Constant), TRS, CHA

| Coefficients ^a | | | | |
|---------------------------|-----------------------------|---------------------------|---|------|
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |

| | B | Std. Error | Beta | | |
|------------|-------|------------|------|---------|------|
| (Constant) | -.312 | .059 | | -5.326 | .000 |
| 1 TRS | -.532 | .045 | .532 | -11.918 | .000 |
| CHA | .437 | .044 | .438 | 9.820 | .000 |

a. Dependent Variable: PFB

Source: econometric output, 2021; Decision rule: 5%

The regression result shows that the model is fit for the study since the f-statistics is significant at 5% level of significance. The result also shows that transactional leadership style has a negative and significant effect on the performance of family businesses in North Central, Nigeria while charismatic leadership style has a positive and significant effect on the performance of family businesses in North Central, Nigeria. These effects are significant since the P-values are less than 5%. Thus, the study rejects the null hypotheses and concluded that transactional leadership style has a negative and significant effect on the performance of family businesses in North Central, Nigeria. Also, charismatic leadership style has a positive and significant effect on the performance of family businesses in North Central, Nigeria. The $R^2 = 0.75$ indicates that only 75% of variation on leadership style can be used to explain by the performance of family businesses in North Central, Nigeria while 25% can be explained by other factors not noted in the regression model which is referred to as error term.

Discussion of Findings

The study found out that leadership style has a significant effect on the performance of family businesses in North Central, Nigeria. Other findings were that transactional leadership style has a negative and significant effect on the performance of family businesses in North Central, Nigeria. This was so because it was discovered by most of the family business owners during start-up will have a good effect on the business but later on the transactional style of management will affect the business. The implication was that most employees reject this type of leadership style as during the long run refuse to take instruction from the leader. Hence the present study is in line with Abasilim et al., (2019), that examines the relationship between transactional leadership style and firm performance in Lagos State Civil Service Commission of Nigeria. The survey data were collected from the employees of the organization, and the Statistical Package for Social Sciences (SPSS) version 22.0 was used for the statistical analysis. The results show that transactional leadership style shows an insignificant small negative relationship with firm performance.

Also, charismatic leadership style was found to have a positive and significant effect on the performance of family businesses in North Central, Nigeria. What this meant was that at both the initial start of business and up to the end of the business, employees gave in their best because of the leadership style employed by the leader. Therefore, the present study corroborated with a study by Othman et al. (2013) who revealed that charismatic leadership style has a positive relationship with firm performance among Nigerian public university lecturers. The study disclosed that enthusiasm, recognizing accomplishments, providing direction, and encouraging creativity offered by the leadership among Nigerian public universities accounted for the reasons for effective performance by Nigerian public university lecturers.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that leadership style has a significant effect on the performance of family businesses in North Central, Nigeria. Other findings were that transactional leadership style has a negative and significant effect on the performance of family businesses in North Central, Nigeria. Also, charismatic leadership style has a positive and significant effect on the performance of family businesses in North Central, Nigeria. The study also concluded that charismatic leadership style contributes to the performance of family businesses in North Central Nigeria but the contribution of transactional leadership style is indifferent as the owners of the family business spend much in taking decisions with minimal

input from other employees as these actions cloud their decisions. The study also concluded that charismatic leadership style is positive as the leader is willing to carry everybody along and the employees are also willing to work for the leader to ensure performance of the family business is realised. In line with the conclusions, the study therefore, recommends that family business owners in the North Central should continue to maintain and use charismatic style to improve their businesses as it was proven to motivate and encourage employees to give in their best on the job because of the leader. Also, the study recommends that less of transactional leadership style should be adopted as this style puts the employees away, thereby making performance of the family business to be stagnant.

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Organizational Change and Employee Productivity: Evidence from selected Deposit Money Banks in Kogi State, Nigeria

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Abstract

Organizational Change is not only vital for the efficient functioning of Deposit money banks but also provides a wider importance to various stakeholders. The recapitalization and consolidation exercise in Nigeria undercover the weak performance of banks leading to employees productivity issues. Knowing what are the critical key factors that influences productivity is vital to ensure long term performance. This study examines the effect of organizational change on employee's productivity in selected listed banks in Kogi State-Nigeria. The population comprises of 599 employees of three (3) filtered banks with national spread in Kogi State quoted on Nigeria Stock Exchange while the sample size was extracted using Taro Yamane (1964) method bringing the study sample size to 161 but 153 are suitable for analysis. The study adopts a descriptive survey design and employed structured questionnaire to collect data from respondents and the hypotheses were tested using Multi-variable Regression and Partial Least Square Structural Equation Modeling (PLS-SEM) to analyze the data collected. The study findings revealed that both Functional Change (FC) and Structural Change (SC) have positive but insignificant effects on the selected bank employees' productivity (EP). The study recommends amongst others, that a holistic review be carried out by the bank management on the processes involved in implementing such changes so that employees get involved and are allowed to put in their thoughts. This will produce an informed decision that is well understood by the management and employees alike thereby stimulating productivity in the employees.

Keywords: Organization, Structural, Functional changes and Employee Productivity

INTRODUCTION

Businesses across the world are restructuring their operations and re-strategizing to overcome stiff competition facing the business world (Gomez-Meija, Balkin & Cardy, 2007). One of the strategies open to every organization which supports the process of its development is organizational change (Kassim, Tahajuddin, Shahzad, Isa, & Mat, 2010). Organizational change comes from the nature and environment of the organization due to series of events which supports the process of development in organizations (Kassim, et. al., 2010). Basically, organizational change includes; merger, acquisition, internal restructuring and change of functions, innovation development, behavioral and technological changes. The Nigerian banking industry has undergone significant changes ever since it reformed in 2005 through recapitalization and consolidation which help banks to become stronger players and ensure longevity and hence higher returns to shareholders over time and greater impacts on the Nigerian economy (Soludo, 2004). The reforms preceded against the backdrop of underperformance due to highly undercapitalization of deposit taking banks; weakness in the regulatory and supervisory framework; weak management practices; and the tolerance of deficiencies in the corporate governance behaviour of banks. These changes had restructured the industry in terms of the number of institutions, ownership structure, as well as depth and breadth of operations. Prior to the reforms, the state of the Nigerian banking sector was very weak (Soludo, 2004). Also, in today's dynamic and competitive economy, an organization requires more well qualified, dedicated and capable employees in order to achieve their goals and to prosper in the intense competitive business environment. Employee productivity is the most essential and imperative for organizations competitiveness. Employee productivity is the real asset of an organization and plays a

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major part towards progress of the organizations (Olajide, 2013). It is therefore vital for banks to fully utilize their resources both liquid and non-liquid resources (Ajala, 2012). The employees in any organization where change is taking place have been on the risk side because their psychological contracts have been violated. This results to lower job satisfaction, lower perceived fulfillment of organizational obligations, and higher level of intentions to quit (Robinson & Morrison, 1994).

The reforms forces banks to embark on certain moves including opening up of more branch offices both local and international, introduction of new technologies, deregulation of financial services and corporate behavior, new product and services development and increased emphasis on shareholders' value that are changing incessantly. Consequently, employment was generated with high expectation to accomplish targets, resulting to unwarranted transfers, rotation of tasks and functions and other complexity such as work load stress, procedures to meet up tight routine tasks and lost of employment arising from merger or acquisition which hinders their optimal performance. The surviving employee sees their place of work as slave camps due to the reforms which created anxiety and concerns for employees. Nigerian money deposit banks embarked upon certain strategic moves in re-structuring to improve the industry (Adegbaaju & Olokoyo, 2008; Soludo, 2007). The field of organization change has attracted many researchers' attention. The major responsibility of banks in this regard is to build up a right mix of changes and conceptual understanding amongst their employees. To achieve this, a continuous process of organizational change interventions in banks is a must because it is vital and a necessary part in promoting productivity of employees. This study, therefore, goes on to discuss one of the core functions of bank management which is organizational change and how it effects on employee productivity after being implemented. This study also aims to test the importance of organizational change-related variables that significantly affect the productivity of bank employees.

However, series of research had been conducted in the areas of structural change in relation to employees' productivity in different sectors and in different countries. For instance; in Manufacturing sector (Donal, 2019; Al-Qatawneh, 2014;), in service sector other than banking: (Mugizi, et al., 2019; Perawironegoro, 2018), in banking sector: (Omondi et. al., 2017) in Kenya and (Bambang, et al., 2016) in Uganda in relation employee performances revealed negative and insignificant relationship between employee performance and structural change. The few studies conducted Nigeria in relation to structural change are Shabbir, (2017) the study revealed a positive significant influence on productivity. Okaforet. al (2017) the study revealed a positive significant influence on employee performance, but the one conducted by Wilson, Benard and Silaji (2019) on structural change and employees of a private University, the study revealed a positive but insignificant relationship between structural change and employees productivity of the University. The challenge is that, most of the studies were carried out in foreign countries which may not be generalized in Nigeria context, particularly as Nigeria has undergone series of changes in the banking sector, especially in the period of recapitalization till date. Based on the problem, research question is formulated to guide the study as: will designing an appropriate mix changes be a critical factor for success to the selected banks and significant on employee productivity? In order to add to the literature and fill the identified gaps, the study is motivated to investigate on organizational change and employee productivity evidence from selected banks in Kogi State in Nigeria for the period of fifteen years (2004-2019). To this end, two (2) hypotheses were formulated and tested in order to find out the effect of organizational change on employee productivity (EP) using functional and structural changes as proxies of independent variables (Organizational change). The basic hypothesis underlying the study includes:

H₀₁: Structural change has no significant effect on employee productivity of the selected banks in Kogi State- Nigeria.

H₀₂: Functional change has no significant effect on employee productivity of the selected banks in Kogi State- Nigeria.

LITERATURE REVIEW

Conceptual framework

Organizational Change

According to Khosa, Rehman, Asad, Bilal, and Hussain, (2015), the concept of organizational change arises from the nature of the environment of the organization. Change means series of events which supports the process of development in organizations. Organizational change generally means rightsizing, new development and change in technologies, rescheduling operations and major partnerships. According to Leavitt (2003), organizational change is any initiative or set of actions that result to a shift in direction or progression that affects the way an organisation operates. Change is the process of becoming different. It can be on purpose and intended by the management within the organisation, or change can originate external to the organisation and beyond its control. Karanja (2015) argues that change can affect the strategies an organisation to carry out its mission, strategy implementation, tasks and functions performed by the people within the organisation, as well as the relationships between those people. Chin (1998) asserts that change is a fact of organizational existence. Therefore, he argues that an organisation that does not change cannot survive in the contemporary business environment. Kansal and Singh (2016) view organizational change as a movement from its current position to desired position for individual, employees and organization. Change helps to improve the potential of employees and organizations so that they can survive in competitive business world. Also, organizational change is not only for products and services; it also includes organization change in machines and equipments at organizational level, employees' retention, mergers or acquisitions.

Structural Change

Jumanne and Njoroge (2018), posit that organizations may find it necessary to change their organization structures in order to remain competitive or adapt to changes that have happened or are anticipated to happen to the organization. Organizational structure defines the way employee's complete tasks and interact with each other in the organization. Organizational structural changes can inhibit or promote employee performance, depending on how effectively the supervisory relationships and workflow influences productivity (Amed, Rehman, Asad & Bilal, 2013). The structure of an organization determines how the roles, powers, and responsibilities are assigned, controlled and coordinated and how information flows between different levels of management. According to Shabbir (2017) Structural change means placement of employees into strategic positions of responsibility with authority with a view to achieving banks' objectives and mission. The study observed that adopting appropriate structure is the fulcrum on which employees' performance of brewing firms revolves. However, every structure has its advantages and disadvantages structure is depended on the type of organization. Omondiet al (2017) Organization structural change here refers to both physical and non-physical divisions and barriers between employees in the organization that determine the flow of knowledge. This is both in terms of size of teams of employees working together and their geographical dispersion. This structure can either be centralized or decentralized. Alipoor et al (2017) The concept of structural change emerged as organizational graph which is a visible symbol of all organizational activities, communicational methods and procedures so it can be said that organizational graph is a summary of actual organizational structure (Hatamiet al., 2013. Organization structural is the framework of relationships, dominating the jobs, systems, operational processes, people and groups that are trying to achieve their goal (Jamshidi, 2014). This structure should be appropriate for the position of the organization, in other word, structure is the clear mirror of rules, regulations, procedures, standards, decision making position, the manner of communications, separation of sections and job and also merging them and hierarchy of authorities.

Functional Change

According to Jones (2017), functional change is an efforts made by bank managers through transfer of resources to the areas where it most value in response to environmental change created. Functional change refers to the rational and economic valuations of individuals. Function change is a simple concept for

organizing the firm in term of employee's day – to day activities for firm improvement and to avoid burdens and monotony of work. Different functions such as marketing, finance, human resources, training, research and development, information Technology etc each has their own department which focuses exclusively on their functions. Fraser Sherman. (2016) states that a department may fixate on its own function, its own budget and its own goals with no thought for the company or the organization as a whole.

Employee Productivity

Hanaysha, (2016) Employee productivity is an assessment of the effectiveness and efficiency of an employee or group of employees in an organization. One of the key issue that most organizations face nowadays is the need to improve employee productivity. It can also be assessed according to the amount of units of a product or service that an employee handles in a defined time frame (Piana, 2001). As the success of an organization relies mainly on the productivity of its employees, therefore, employee productivity has become an important objective for businesses (Cato & Gordon, 2009; Gummesson, 1998; Sharma & Sharma, 2014). According to Sharma and Sharma (2014), employee productivity is based on the amount of time that an employee is physically present at his/ her job, besides the extent to which he/ she is “mentally present” or efficiently working during the presence at the job. Companies should address such issues in order to ensure high worker productivity. Ferreira and Du Plessis (2009) indicated that productivity can be evaluated in terms of the time spent by an employee actively executing the job he or she was hired to do, in order to produce the desired outcomes expected from an employee's job description. Sels, Winne, Delmotte, Maes, Faems, and Forrier (2006) and Gummesson, (1998). Employee productivity is an assessment of the efficiency of an employee or group of employees. In actual terms, productivity is a component which directly affects the company's profits. Productivity may be evaluated in terms of the output of an employee in a specific period of time. Typically, the productivity of a given worker will be assessed relative to an average out for employees doing similar work. It can also be assessed according to the amount of units of a product or service that an employee handles in a defined time frame (Piana, 2001). As the success of an organization relies mainly on the productivity of its employees, therefore, employee productivity has become an important objective for businesses (Cato & Gordon, 2009; Gummesson, 1998; Sharma & Sharma, 2014).

Empirical Review

Many studies have been conducted on the subject of organizational change and its effect of employee productivity, such as; Methode, Irau, and Bayo (2019) carry out a study on the effect of organizational change on employees' productivity among commercial banks in Burundi, using structural change, technological change, strategic change as proxies as the independent variable. The study revealed a positive significant effect on employees' productivity. Omondi et al (2017) investigated the relationship between organization structural change and performance in commercial bank employees. The study revealed that structural change had no significant influence on performance in commercial bank employee in Kenya and concluded that firms that fail to design appropriate structural change that will suit organizational workforce will definitely encounter the problem performance from its employees. But Donal (2019) examined the effect of structural change on employees' performance of manufacturing firms. The study revealed a positive insignificant effect on performance. However, Alipoor et al. 2017 examined the effects of structural change on the performance. This study is applied one in terms of goal and descriptive of correlation-survey type in terms of collecting data. The result revealed that structural aspects of change have a significant negative effect on job performance of employees.

Jumanne and Njoroge (2018) study investigated the effect of structural change management on employee performance. Secondary data was obtained from annual reports of government publications and earlier research. Reliability of the instruments was tested using Cronbach's alpha reliability. Data was analyzed using descriptive and inferential statistics. Multiple linear regression analysis was done using Microsoft Excel 2013 Analysis ToolPak and output to test study hypotheses. The results indicated that structural

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change management had a positive significant effect on performance of employees. Similarly, in the work of Nwinyokpugi (2018) investigated on organizational change and employees productivity in the Nigeria Banking Sector in Nigeria. The finding revealed that all tested dimensions of organizational change are significantly associated with the measures of employees' productivity. Empirical studies have therefore got mixed findings regarding organizational change and employee productivity performance. All of the above also signifies that organizational change and its resultant effect might be seen as a black box by the concerned stakeholders not only in a developing nation like Nigeria but also the world over; hence, there is still a gap to be filled in this area.

Theoretical Framework

Kurt Lewin (1951) underpin theoretical framework for the study. One of the earliest models of planned change was provided by Kurt Lewin (Lewin, 1951). Lewin conceived of change as modification of those forces keeping a system's behaviour stable. The study employed the Theory of Lewin's Change Management Model "Lewin (1951), cited in (Robbins, et.al., 2008) argued that successful change in organizations should follow three steps:" Unfreezing: change efforts to overcome the pressures of both employees' resistance and bank conformity". Movement: "a change process that transforms the organization from the status quo to a desired end state" and the third step is Refreezing: "stabilizing a change intervention by balancing driving and restraining forces". In this respect, "Harper (2001) proposed that for effective change to take place, bank managers must ensure that all relevant stakeholders are given the opportunity to be engaged in decision-making and problem solving in a collaborative manner. A better understanding of the needs and benefits of change may result in little or no resistance on the part of change recipients. In the final step (refreezing), the emphasis is on the reinforcing of new processes and tasks in the organization by the employer. For this step to be successful, employees must be acknowledged, as reward is an important and crucial to organizations and employees should receive appropriate recognition if they embrace the structure change. Therefore, organizational change is a valuable management tool that can enhance economic growth, bank's performance and their employees according to Lewin's Change Management theory. This theory proposes that organizational structural change leads to employee performance. This theory, therefore, was the basis for relating organizational change and employee productivity of selected commercial banks in Nigeria.

METHODOLOGY

The study assesses the effect of organizational change on employee's productivity in selected Nigeria commercial banks listed with Nigeria Stock Exchange (NSE) in Kogi state. The study adopts descriptive survey design method. The population of the study is 599 bank employees being the staff strength of the three (3) filtered commercial banks in Kogi state with national spread. While the sample size was extracted using Taro Yamane (1964) method bringing the study sample size to 161. The banking sector was selected for this study because of its importance to Nigeria economic growth and as one of the largest and active sectors listed with the NSE.

Table 1: Operationalization of Variables, Measurement Scale and Justification

| Variable | Acronym | Type of Variable | Measurement | Justification |
|-----------------------|----------------|-------------------------|--|--|
| Employee Productivity | EP | Dependent | Questions 41-45 from the questionnaire | Olajide (2014), Khosa, Ali, Bilal and Hussain (2015) |
| Functional Change | FC | Independent | Questions 22-25 from the questionnaire | Alsamydai, Alnaini, Alnidawy and Alkasasbeh (2013) |
| Structural Change | SC | Independent | Questions 8-12 from the questionnaire | Aktar (2015) |

Source: Researchers compilation (2021)

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A Structured questionnaire was used as the research instrument to collect data from respondents of deposit money bank employees in Kogi State. The measurement scales of constructs were adopted and adapted from previous studies to ensure that the respondents can easily understand them and suit the context of this study. In the literature, organizational change is composed of two dimensions, namely functional change and structural change. Both dimensions were measured using the summation scale; functional change (three items), structural (two items). Furthermore, employee productivity was measured using three items taken from the studies of Chen and Tjosvold (2008); All the items were measured on fivepoint Likert scale ranging from “1=strongly disagree” to “5= strongly agree”. The data was analyzed on PLS – SEM (Partial Least Square - Structural Equation Modeling). Tests such as; Factor Loadings of validity, Cronbach’s alpha reliability, Average Variance Extracted for convergent validity, composite reliability for consistency and Variance Inflation Factor (VIF) for collinearity was conducted. Regression analysis was conducted to generate the findings of the study. The measurement model was further subjected to (GoF) goodness of fit analysis. After that, the structural model was assessed to test the individual hypotheses. Structural Equation Modeling is used due to its strengths in yielding accurate and reliable results specifically when path models include two or more variables making it easy to articulate research hypothesis (Gunzler, Chen, Wu, and Zhang, 2013). The technique is considered appropriate when the path model includes one or more formatively measured constructs and also, when distribution issues such as normality are a concern (Hair, Sarstedt, and Ringle, 2019). The model is specified thus:

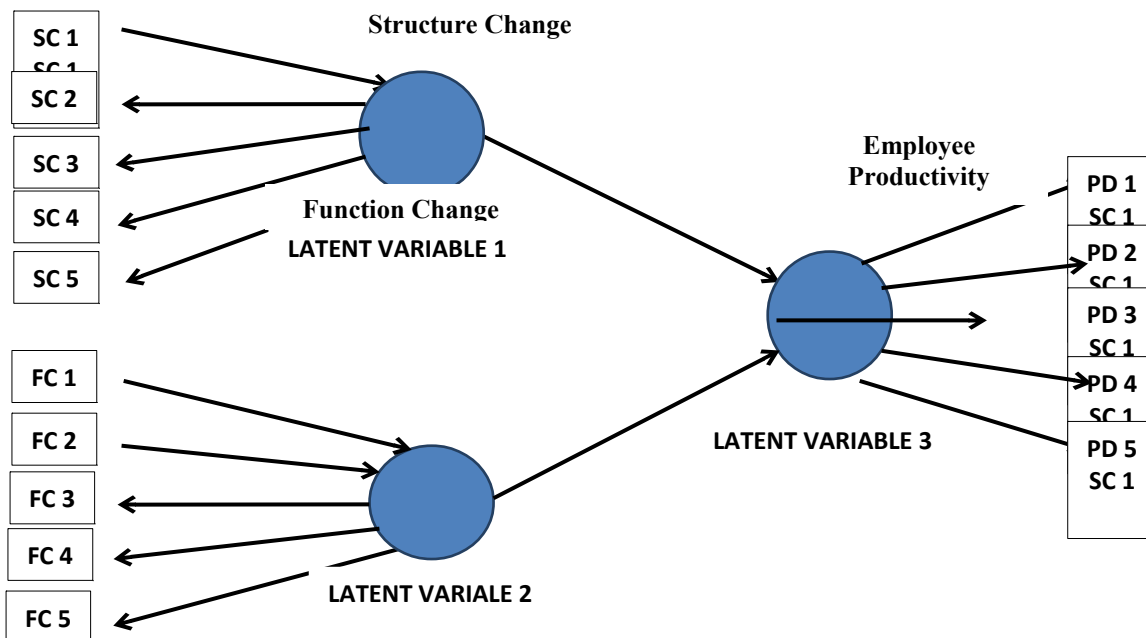


Fig 1: Measurement Model for Organizational Change and Employees' Productivity.

RESULT AND DISCUSSION

Descriptive Statistics

The table: 2 below summarize the descriptive statistics of the entire data sets.

| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
|--------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| Variables | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| SC | 161 | 1 | 5 | 3.97 | 1.229 | -.343 | .250 | -.302 | .495 |
| FC | 161 | 1 | 5 | 4.22 | 1.062 | -.279 | .250 | .567 | .495 |
| PD | 161 | 1 | 5 | 4.10 | 1.143 | -.221 | .250 | .640 | .495 |
| Valid N (listwise) | 161 | | | | | | | | |

Source: SPSS Output, 2021

The table above described the data in terms of the mean, minimum, maximum, standard deviation, skewness and kurtosis values. Structural change (SC) had minimum and maximum values of 1 and 5 respectively with an average value of 3.97 and a standard deviation value of 1.229. Functional change (FC) also, had minimum and maximum values of 1 and 5 respectively; however, it showed an average of 4.22 along with a standard deviation of 1.062. Similarly, the minimum and maximum values of productivity (PD) recorded were 1 and 5 respectively with an average value of 4.10 and a standard deviation of 1.143. All the variables had skewness and kurtosis values less than 1 which suggest that the data were normally distributed and hence satisfying the ordinary least square regression assumption (Lumley, et al., 2002).

Measurement Models

The first step in reflective measurement model assessment involves examining the indicator loadings. Loadings above 0.708 are recommended, as they indicate that the construct explains more than 50 per cent of the indicator's variance, thus providing acceptable item reliability (Hair, et al., 2019). Therefore, all indicators with loadings lesser than 0.708, were discarded from the model.

Reliability of the Study Scale

| S/N | Variables | Factor Loadings | Cronbach alpha | Composite Reliability | Average Variance Extracted (AVE) | No of Items |
|-----|-------------------|----------------------------------|----------------|-----------------------|----------------------------------|-------------|
| 1 | Functional Change | FC1 .907 FC2 .862 FC3 .894 | 0.878 | 0.922 | 0.798 | 3 |
| 2 | Structural Change | SC1 .839 SC3 .852 | 0.826 | 0.889 | 0.728 | 2 |
| 3 | Productivity | PD1 .780 PD2 .881 PD3 .883 | 0.779 | 0.900 | 0.819 | 3 |

Using Jöreskog's (1971) composite reliability, the study tested for internal consistency of the study. All the values fall within the Hair, et al., (2019) rating of good consistency. The Cronbach alpha values were above 0.60 which is the minimum threshold as recommended by Sekaran (2010). To test for the convergent validity, the average variance extracted (AVE) was used. All the values were above 0.50 which indicates that the construct explains at least 50 percent of the variance of its items. The variance inflation factor (VIF) was used to evaluate collinearity of the formative indicators. All the VIF values were less than 5 which indicate the absence of critical collinearity issues among the indicators of formatively measured constructs (Hair, et al., 2019).

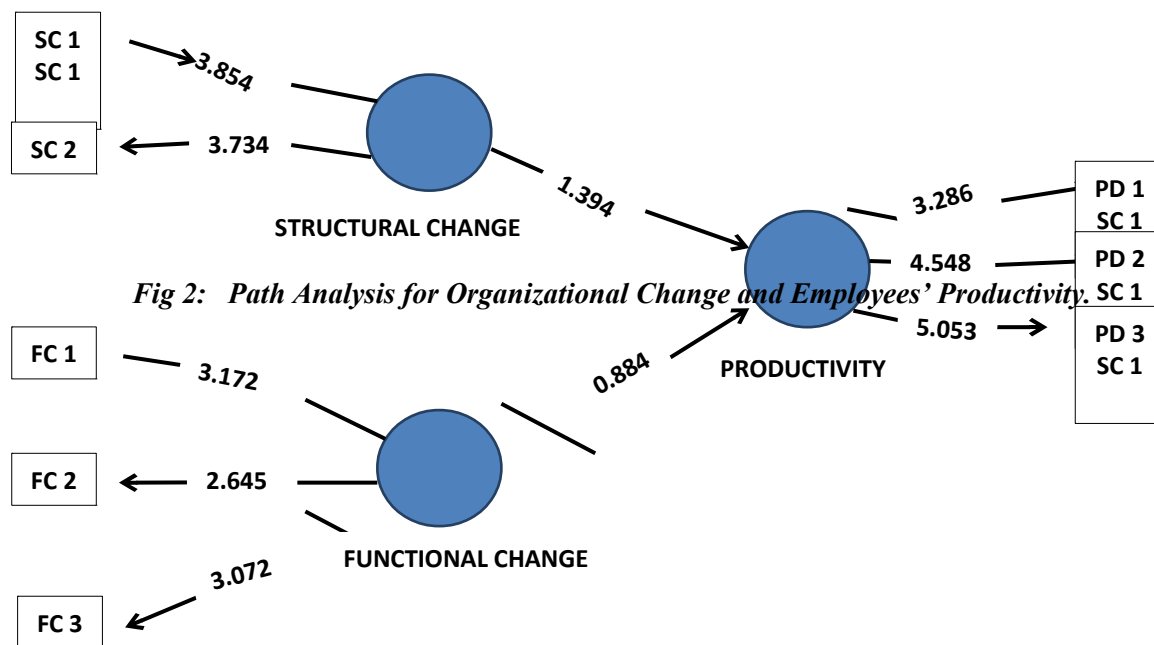
Table 3: Variance Inflation Factor (VIF)

| Variables | VIF |
|-----------|-------|
| FC1 | 2.353 |
| FC2 | 2.773 |
| FC3 | 2.274 |
| PD1 | 1.942 |
| PD2 | 2.112 |
| PD3 | 1.704 |
| SC1 | 1.687 |
| SC3 | 1.687 |

Source: PLS_SEM 2021

Structural Model Assessment

Having satisfied the measurement models, the next is to assess the structural model of the study. The R-square component stood at 33.6% indicating that structural and functional change accounts for 33.6% variation in employees' productivity. The remaining variation is explained by other factors not included in the study. Based on Hair, et al., (2019), the r-square is considered weak but doesn't negate the findings of the study. The result of the path analysis is presented below:



Model Goodness of Fit (GoF)

The study validated Goodness of Fit (GoF) of PLS model as suggested by Hair, et al. (2019). This study used the Standardised Root Mean Square Residual's (SRMR) to conduct the validity index. The choice of this index was based on the fact that the SRMR provides the absolute fit measure where a value of zero indicates a perfect fit. The study adopted Hu and Bentler (1998) suggestion that a value of less than 0.08 represents a good fit while applying SRMR for model goodness of fit. The study result indicates an SRMR value of 0.080. This indicates the model fits. Aside the chi-square, the other measure indicates a goodness of fit on the model of the study.

Table 5: Standardised Root Mean Square Residual's (SRMR)

| | Saturated Model | Estimated Model |
|-------------------|------------------------|------------------------|
| SRMR | 0.080 | 0.080 |
| d_ ULS | 0.229 | 0.229 |
| d_ G | 0.164 | 0.164 |
| Chi-Square | 163.388 | 163.388 |
| NFI | 0.706 | 0.706 |

Source: PLS-SEM 2021

To examine the effect of organization change on employee productivity of selected bank employee listed on Nigeria Stock exchange in KogiState, Nigeria, the formulated hypotheses were tested usingmultiple regression model as shown in Table 3.

Table 6: Research Findings

| | Hypotheses Testing | Path Coefficient *** (Beta) | t-value | P -value | Findings |
|-----------------------|---|--|----------------|-----------------|-----------------|
| H0₁ | Functionalchange has no significant influence on employee productivity | 0.105 | 0.884 | 0.377 | Accepted |
| H0₂ | Structural change has no significant influence on employee productivity | 0.152 | 1.394 | 0.163 | Accepted |

Discussion of Findings

In line with the objective of the study, two hypotheses were formulated on the two variables. One, that, functional change has no significant influence on the productivity performance of bank employees in Kogi state. Two that structural change has no significant influence on the productivity of selected bank employees in Kogi State. Both variables are accepted from the result of the analysis.

Hypotheses: (H0₁). The result from of the analysis indicates that functional change has no significant influence on the productivity of the selected bank employees in Kogi State. The decision was reached based on the t-value that is less than 1.964 ($\beta = 0.105$, t-value = 0.884). Thus, the analysis indicated acceptance of the null hypothesis. This implies that function change has added little or no change to productivity performance of the employees of the selected banks in Kogi State. This finding concurs with the findings Lambert et al. (2006) Organization Structural and Employee productivity of Academic Staff in a Private University. The study established that routine responsibilities had significant negative effects on organization productivity. However, the finding was inconsistent with of Shafae et al. (2012) who reported that daily functional change had a positive and significant effect on productivity.

Hypotheses: (H0₂). Also the result from the analysis indicates that structural change has no significant influence on the productivity performance of bank employees in Kogi state. The decision is based on the t-value should be 1.964 and above. The values of the test is ($\beta = 0.125$, t-value = 1.394). Thus, this implies that the null hypothesis is accepted implying that structural change has no significant influence on productivity. Though positive, but may not have added any significant difference to the productivity of employees of the selected banks. This study found that organizational change variable (Structural change) explain 33.6% of overall variancein employee productivity performance of the selected banks. According to Hair et al (2019), the Chi-square is weak but does not invalidate the findings of study. The test resultrevealed that there is a positive and insignificant influence structural change on performance; this result aligns with the hypothesis. The finding is in agreement with the study of Alipoor et al. 2017 which indicate that structural aspects of change has a significant negative effect on job performance of employees. Similarly the work of Omondi et al 2017 revealed that, structural change had no significant influence on performance in commercial banks in Kenya and concluded that firms that fail to design appropriate structural change that will suit organizational workforce will definitely encounter the problem

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performance from its employees. However, the studies of Jumanne and Njoroge 2018 disagree with the finding of the study and states that structural change management had a positive significant effect on performance of employees.

CONCLUSION AND RECOMMENDATION

The study investigated the effect of organizational change on the productivity of bank employees in Kogi state, Nigeria. Organizational change was measured using functional and structural changes on employees' productivity. All hypotheses are supported, which indicates a relationship between organizational change and employee's productivity. Therefore, organizations seeking higher employee's productivity, should consider the important role played by organizational structural and functional changes. Studies have also shown that organizations that fail to design appropriate mix of changes will definitely encounter the problem of employees' productivity and performance. The study therefore concluded that the insignificant effect could be attributed to the process of implementing changes and recommends to Stakeholders of Banks: A holistic review should be carried out on the processes involved in implementing changes so that employees get involved to allow for creativity and innovativeness on part of employees. Also, in line with the objective of this study to addressing structural issues with a view of enhancing employee's productivity, Managers of Nigeria Deposit banks should give more serious attention in designing an appropriate structural mix that must match all units and component parts of organization to facilitate employee's productivity. This will produce an informed decision that is well understood by the management and employees thereby stimulating productivity of the employee and the banks performance. To Nigeria Regulatory Authorities: The weak corporate governance of banks as evidence by high employee turnover resulting to poor employee productivity should be given adequate and appropriate legal framework via policy and regulatory authorities. Also, Government should include ownership structure arrangement by limiting their holding capital to avoid unwarranted control. The study contributed to a developing research literature on the organizational change and employee productivity in Nigeria. Findings of the study indicated that employees in the banking sector should consider more forms of change strategy than the structural and functional changes, because, the statistical analysis show a weak positive relationship between employee productivity and organization change. By implication, banks should give more importance on improving employee productivity through other forms of change other than studied variables.

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Effect of Board of Director's Heterogeneity on the Financial Performance of Listed Deposit Money Banks in Nigeria

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Abstract

While boards are the main tool of internal governance mechanism, their efficacy may vary depending on their diversities. This study examined the impact of Board of Directors' heterogeneity on the financial performance of listed deposit money banks in Nigeria. This area of board diversity especially the ethnic diversity is still a novel area of research in Nigeria. The financial performance in this study was the dependent variable while nationality, gender and ethnic composition of Board of Directors were the independent variables. The population of the study consists of fourteen(14) listed deposit money banks in Nigeria as at 31st December 2019. Ten of these banks constituted the sample size for the period of ten years (2010-2019). The study employed panel multiple regressions as a tool for analysis. Secondary data obtained from the financial statements of the companies were analyzed. The result showed that gender and ethnicity of board directors had positive and significant impact on banks financial performance while, nationality of the board of directors showed a negative but significant relation to banks financial performance. The study conclude that ethnic heterogeneity is an essential ingredient in board composition as it helps firms tap into numerous human resources available to it. It is therefore recommended that ethnic composition of Board of Directors of listed deposit money banks in Nigeria should be integrated into the corporate governance practices as allowing for a more ethnic balance translates into better financial performance.

Keywords: Board of Directors, Heterogeneity, Nationality, Gender, Ethnicity and Financial Performance

INTRODUCTION

In recent years, matters surrounding board of director leadership and oversight roles have taken on increased significance to investors so much so that today's economic challenges highlight the importance that board heterogeneity plays in enhancing value and providing companies with a full range of fresh talents and experience. These challenges have been perceived overtime and have become a matter of concern after the collapse of many big multinational companies around the world arising from various board scandals. The collapse of these multinational companies has raised concern over the activities of the board of directors and this has brought about looking out for other governance mechanisms one of which is board heterogeneity. Many practitioners have clamored for this board heterogeneity with the argument that it can mitigate the effect of homogeneous board such as groupthink which is a phenomenon in which members' effort to achieve consensus override their ability to realistically appraise alternative courses of actions (Rhode & Packel, 2010).

Board heterogeneity can be a substitute for other governance mechanisms as differences among members on the board can improve the quality of board decisions but only if the board members themselves take the advantage of the reward of heterogeneity rather than window-dressing the concept of heterogeneity on the board (Wahid, 2012). Board heterogeneity focuses also on the linkages between directors and the strategies they pursue as regards the affairs of their organization. These strategies are as much a reflection of the ingrained characteristics and backgrounds of the executives. Bank performance is function of various factors such as regulatory scrutiny, degree of financial development and deposit insurance systems. It is also understood that the banking industry is largely characterized complex agency conflicts than any other industry (Levine 2004). For this reason, it of utmost importance that shareholders consistently seek various governance mechanisms that can help limit this conflict, of which board heterogeneity is one of the mechanisms that can mitigate the agency conflict by providing various alternative mix of directors on the board.

While boards are the main tool of internal governance mechanism, their efficacy may vary depending on their diversities. With the relationship between heterogeneity in boardroom and firm performance, or lack thereof, firms will be encouraged to make appropriate choices about board appointments to create and improve firm value as constructing a quality boardroom is all about the caliber and perspective of individual directors chosen. For example, one major noteworthy aspect of Enron's board as pointed out by Masulis, Wang and Xie (2010) about foreign directors was that its audit committee included two foreign independent directors; the Chairman of the Hang Lung Group in Hong Kong and a senior executive of Group Bozano in Brazil. This incidence, at a minimum, raises questions about the effectiveness of foreign directors' monitoring of a firm's operations and financial reporting. In Nigeria, the poor performance of boards in 2009 which almost led to the near collapse of nine banks in the country has eroded investors' confidence in banks leading them into divesting their investments and has also painted a poor image on the financial sector. It is a matter of concern as there are very few empirical analyses on this aspect of board diversity in Nigeria as most studies have been on board independence, CEO duality and board gender but rarely board ethnicity (Ogbechie, 2012; Ogbechie&Koufopoulos, 2010). Ujunwa, Okoyeuzu, andNwakoby (2012) and Omoye and Eriki (2013) that have both examined ethnicity of directors of randomly selected, but their result remains inconclusive as some variables failed to test at any significant level. This study focuses on the banking sector because of their complex agency conflicts when compared with other industries. Consequently, the basic hypothesis underlying this study is stated thus:

H0₁. Board nationality, board gender and board ethnicity of board members has no significant effect on the Return on Equity (ROE) of listed deposit money banks in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Board Heterogeneity

Heterogeneity is a word that signifies diversity. There are varieties of dimensions along which individuals within a group can differ such as differences in board composition in terms of ethnicity, age, education, nationality and gender (Schwizer, Cucinelli & Soana,2012) While some of these differences are observable, others are not. The Australian Multicultural Foundation (2010) defined the term heterogeneity as significant differences between people, including perceptions of differences that need to be considered in particular situations and circumstances. Often the most significant differences are the least obvious, such as our thinking styles or beliefs and values. They gave multiple dimensions of diversity which may be more or less significant depending on the nature of the organization. These include gender, age, culture, ethnicity, regional culture, sexual orientation, mental and physical, abilities, education religion, language literacy, work experience functional, role and status, economic status family status, career roles, geographic location, work style, communication style, learning style, thinking style, management style,

personality, ideology, profession, and industry. The definition above can be said to be lacking as it tends to describe beliefs and values as least obvious and less significant. For instance, in a country such as Nigeria, these beliefs, values and culture play a major role in our lives and because most of our decisions are mostly affected by our religious and cultural believe. Kiefer (2005) explained the concept of heterogeneity by arguing that homogeneity and heterogeneity refers to the extremes of the diversity scale. They are used as anchoring points, meaning less heterogeneous or more heterogeneous and less homogenous or more homogenous. They refer homogeneity as a diversity score equal to zero. This zero refers to the complete absence of dissimilarities between the individual board members. Heterogeneity refers to the complete dissimilarities between individual board members with regards to the included dimensions. However, they propose that there is no quantitative upper limit for heterogeneity as the scope of dispersion is very wide. From this explanation, the assumption that there are complete dissimilarities between the individual board members is unrealistic because the presence of more than three board members signifies that at least two of the directors are of the same gender.

Van der Walt and Ingley (2003) defined board heterogeneity as the variety in the composition of Board of Directors. Within this definition, there are two (2) main categories of board diversity, namely, demographic diversity and cognitive diversity. Nüesch, (2009) stated that demographic diversity relates to the observable or readily detectable attributes of directors that includes race or ethnicity, nationality, gender and age whereas, Mansoor, Ali, Ali and Ali, (2013) highlight that cognitive diversity relates to the unobservable or less visible attributes of directors, such as educational, functional and occupational backgrounds, industry experience, and organizational membership. Taylor (2001) defined heterogeneity as the variation of social and cultural identities among people existing together in a defined employment or market setting. Social and cultural identity refers to the personal affiliation with groups that research has shown to have significant influence on peoples' major life experiences. These affiliations include gender, ethnicity, race, national origin, religion, age cohort and work specialization, among others. The definition given by Taylor (2001) captures to a large extent the meaning of heterogeneity although it does not specifically relate to the concept of board heterogeneity. However, the definition given by Van der Walt and Ingley (2003) has the combination of the heterogeneity variables further broken down into cognitive and demographic diversity and therefore, the study adopting there definition as it suits the context of our research whereby it captures the variables (explanatory variables) under study.

Foreign National Heterogeneity

In analyzing the linkage between foreign directors and the affairs of the organization that they govern suggests that foreign directors, depending on their cultural distance from the country in which a firm is headquartered, can introduce different values, ways of cognition, and personality features to the board, and domestic internationally experienced managers and directors can contribute to the knowledge of such foreign values, cognition models, and typical personality profiles. In the latter case, it is also conceivable that after a particularly long foreign assignment, a given person will have assimilated certain foreign values, ways of cognition, and personality characteristics typical of the country of his/her stay (Kaczmarek, 2009). Masulis and Wang (2010) found that firms with foreign directors make better cross-border acquisitions when the targets are from the home regions of foreign directors. However, their presence brings about monitoring deficiencies and adverse effect on corporate governance, they also find that foreign directors display poor board meeting attendance records, and firms with foreign directors on their boards tend to pay their CEOs excessively high compensation and are more prone to commit financial misreporting that requires future restatements. Their evaluation of the overall effect of foreign directors on firm performance shows that firms with foreign directors are associated with significantly poorer performance, especially when they do not have much business presence in their foreign directors' home region, but they make increasingly larger contribution to firm performance as a firm's operation in their home region becomes more important.

Gender Heterogeneity

Females on the Board of Directors can improve a firm's reputation through reputation-building activities such as philanthropy and community outreach. These charitable giving and philanthropic activities improve the firm's image and reputation, acting as a signal to stakeholders (Brammer and Millington, 2005). However, if female board members are involved in forms of philanthropy that are not strongly related to firm reputation, it will be obvious that the end result of such philanthropic activities will not reflect on the financial performance of the firm (Miller & Triana, 2009). Female directors positively affect the attendance performance of male directors (Adams and Ferreira, 2008), take their role more seriously and better prepare for meetings. They also tend to ask more questions and become more vocal if there are three or more female directors (Konrad, Kramer and Erkut, 2008). As such, gender diversity enhances the board's independence and organizational performance. Female directors are often collaborative leaders, they do not shy away from controversial issues and are more likely than men to ask tough questions, demand direct and detailed answers. They also bring new issues and perspectives to the table, broadening the content of boardroom discussions to include the perspectives of multiple stakeholders and add perspectives that broaden boardroom discussions even further (Kramer, Konrad & Erkut, 2006). Women directors are also considered to be more proactive since they have to face various challenges prior to holding seats on the board, which reward them great prestige in the environment (Krishnan & Park, 2005). Dobbin and Jung (2011) found that a reduction in assets increases the likelihood that a firm will see increases in female directorships, which suggests that growing firms are less likely to appoint women. Their finding suggests that when it comes to performance, the presence of female directors do not affect firms' return on assets (ROA), but have significant negative effects on Tobin's q i.e. an increase in gender diversity on boards is followed by a significant decrease in stock value. This provides some support for the notion that institutional investors do not like to see firms appoint women directors.

Ethnic Heterogeneity

Ethnicity, its existence or degree of force, is not realized in the possession and perpetuation of distinct cultural characteristics by a particular group. Ethnic identity and difference is created and becomes culturally and politically meaningful in terms of how it inter-relates to other groups and to broader social, political and economic processes. Ethnic boundaries, for both sociology and anthropology, tend to be the outcome of social action (Malesevic, 2004). Adopting a policy ethnic diversity will promote the development of a higher level of corporate governance and help to improve the board's decision-making process. People from different backgrounds are likely to approach problems in different ways and allow the board to consider a wider range of options and solutions to corporate issues. Boards diversified along ethnic groups are also said to be less likely to take extreme positions and more likely to engage in higher quality analysis (Wiersema & Bantel, 1992). Marimuthu (2008), found a positive and significant association between board ethnicity and performance. Their findings suggest that increased ethnic diversity on boards of directors would lead to higher firm financial performance and that board ethnic diversity was proven to be an effective tool that should be imposed on boards of directors for a greater performance.

Financial performance

Organizational performance has various measurements but basically two domains are emphasized in the literature. The financial one represented by profitability, growth and market value; and the operational domain that includes nonfinancial competitive aspects such as customer satisfaction, quality, innovation, employee satisfaction and reputation (Venkatraman and Ramanujam, 1986). (Forza and Salvador, 2000) defined performance as; an information system that supports managers in the performance management process mainly fulfilling two primary functions: the first one consists in enabling and structuring communication between all the organizational units (individuals, teams, processes, functions, etc.) involved in the process of target setting. The second one is that of collecting, processing and delivering information on the performance of people, activities, processes, products, business units, etc.

Franco-Santos et al., (2007) argued that the financial performance are mostly denoted by financial ratios which are considered as a meaningful financial indicator which can be used by the different financial information users. Their study classified these financial ratios into liquidity ratios, activity (operational) ratios, profitability ratios, debt ratios and market ratio. The profitability ratios such as the return on assets (ROA) and the return on equity (ROE) are the most used profitability ratios in the analysis. They stated that while ROA measured as net profit to total assets measures the operating efficiency of the company based on the firms generated profits from its total assets, (ROE) measured as net profit to total shareholders' equity measures the shareholders rate of return on their investment in the company.

Empirical Review

Okoye, Olokoyo, Okoh, Ezeji and Uzohue (2020), examined the nexus between corporate governance practices and bank profitability in Nigeria. It adopts the size of bank board and directors' stake as proxies for corporate governance, with return on assets and return on equity as representations for financial performance. The research incorporates firm size as a controlled variable. The estimation technique of the Generalized Method of Moments was employed. Evidence from the research reveals that board size, directors' equity, and firm size substantially affect Nigerian banks' financial performance. Besides, the study shows a robust effect of lagged return on equity on the current level of performance. Therefore, the study concludes that governance in business entities strongly affects their financial performance and recommends maintaining optimum board size to minimize boardroom conflicts. It further recommends that the requirement for substantial equity stake by directors of banking institutions be sustained, as it secures commitment to governance practices that support profitability. Onyali and Okereke (2018), examined the effect of board heterogeneity on performance of firms in Nigeria. Specifically, the study examined the effect of board size, women on board and board independence on return on assets of listed manufacturing firms on Nigeria Stock Exchange. The study adopted Ex-post facto research design. Population of the study is made up of seventy-six manufacturing firms listed on the Nigeria Stock Exchange as at the year, 2016 while thirty-two firms was used as sample of the study. The secondary data used in the study were sourced from the publications of Nigeria Stock Exchange and annual reports of the sampled firms. Multiple regression analysis with the aid of E-view 9.0 statistical software was used for data analysis. Findings of the study revealed that board size, women on board and board independence have significant and positive effect on return on assets of manufacturing firms listed on Nigerian Stock Exchange. Based on this, the study recommended among others that Firms should endeavor to diversify their board for improved groupthink and board effectiveness

Iyafekhe and Ohiokha (2017), examine corporate board diversity and financial performance of Nigerian Banks. The study employed a panel research design; annual data were sourced from banks quoted in the Nigerian Stock Exchange (NSE) as at 2015 and were analyzed using Ordinary Least Square (OLS) statistical technique. The result from the study revealed that gender composition and foreign nationality exhibits significant impact on financial performance of banks in Nigeria, though the strength of their impact differs. However, independent directors and board ethnic diversity had insignificant impact on financial performance of banks in Nigeria. The study envisaged that a high sex composition in favors of women, foreign directors and ethnic diversity in favors of southerners in the board of Nigerian banks will significantly improve their overall financial performance. This research therefore recommends that foreign nationalities in the board of Nigerian banks should be increased because it enhances their financial performance by increasing accessibility to technology, information sharing and reducing inefficiencies in management; it is also recommended that ethnic diversity be given serious consideration if the goal of maximizing corporate financial performance is to be achieved in Nigerian banks. Ilogho (2017), examine the effect of board nationality and ethnic diversity on firms' performance in the Nigeria stock exchange. With the aim of investigating the level of influence ethnic diversity and board nationality would affect firm performance in terms of profitability and growth in a developing economy, the study made use of ROA, ROE and Tobin's Q for financial measures. The study analysed date from 60 non-financial firms with periodic observations from 2012-2015 using the ordinary least squares regression

method. Yemeni formula was used to calculate the sample size out of the remainder 119 listed non-financial after 57 listed firms from the financial sector were removed. The total sample size was further streamlined to 60 based on a common reporting period (January 1st to December 31st) to ensure consistency. The Findings indicate that ethnic diversity and board nationality has no significant influence on the performance level of firms in both profitability (ROA and ROE) and growth (Tobin's Q). Findings also reveal that the average board size of the listed non financial firms in Nigeria meets the countries corporate governance requirement of nine (9) members and the average board has a combination of at least two of the three ethnic groups in Nigeria. The board composition of sampled firms still reveals the presence of family members in same board which is against the central board composition code of corporate governance. This study encourages a diverse board since there is no significant effect on financial based performance; it is still advisable to be diverse except cost outweighs benefits. Diversity always tends to have effects on the way the board members make a decision, or strategic moves. It sets a control, brings innovation and could also slow down the rate of decision making.

Theoretical Framework

Agency Theory

Agency theory was introduced by Jensen &Meckling (1976). Agency theory is directed at the ubiquitous agency relationship in which one party known as the principal delegates work to another known as the agent, who performs the work. The theory assumes that agency problems can be resolved with appropriately designed contracts by specifying the rights belonging to agents and principals (Jensen &Meckling, 1976). Agency theory is also based on the idea that in a modern corporation, there is separation of ownership (principal) and management (agent), and this leads to costs associated with resolving conflict between the owners and the agents (Eisenhardt, 1989; Jensen &Meckling, 1976). Eisenhardt (1989) stated that agency theory is majorly concerned with resolving two problems that arises in agency relationships, first is the problem that occurs when the principal and his agent's goal or objective conflicts and secondly, the inability of the principal to verify if the agent is behaving appropriately.

Resource Dependency Theory

The concept of the "Resource Dependence Perspective" (1978) gained popularity after the publication of the book "The External Control of Organizations: A Resource Dependence Perspective" by Jeffrey Pfeffer and Gerald Salancik became widely accepted in the Anglo-American discussion (Nienhüser, 2008). A fundamental assumption of Resource Dependence Theory laid by Nienhüser (2008) is that dependence on "critical" and important resources influences the actions of organizations and those organizational decisions and actions can be explained depending on the particular dependency situation. In essence, these important resources that influence the behaviour of the organization can be said to be the top management (that is, directors) among others. Resource dependence theory (RDT) maintains that organizations are resource insufficient; they strive to acquire and sustain resources from their external environment. Resources are controlled by external actors who exert demands on the organization. These actors perceive some benefits in their relationship with the organization and exercise power through control over resources. The heavier the dependence on external resources, the more the demands of particular actors controlling these resources are influential (AbouAssi, 2013). Sveiby (2000, 2001) and William and Ho (2001) argued that all facet of human resources need to be fully utilized, and that diversity in human resources will best enable a firm to increase its performance and wealth-creation potential. Similarly, Hermalin and Weisbach (2001) also argue in favour of resource dependency theorists stating that skills, gender experience, expertise, nationality and ethnicity of board members form the important resources to guide and help firm performance. The resource dependency theory is the underpinning theory for this research since it provides a theoretical basis to explain this association between board heterogeneity and firm financial performance, since the theory states that 'board members

with different skills, different cultural backgrounds, different gender, among others, will act as a strategic resource to the firm which may result to superior performance' (Ujunwa *et al.*, 2012).

METHODOLOGY

This study adopted the use of longitudinal panel design. The longitudinal panel design was an appropriate design preferred by the researcher as it aim at establishing relationships between dependent and independent variables through quantifiable results. The population of the study constitutes all the 14 Deposit Money Banks listed on the Nigeria Stock Exchange as at December 31st, 2019. Based on this population, the study employed censoring sampling technique to suit the model adopted for this study, a filter is employed to select some of the banks as follows; Banks that are not listed as at 2005 are dropped; banks that are listed since 2005 and are no longer in existence or have been delisted as at 2012 were also eliminated. Consequently, 2 banks were eliminated using the filter, leaving 12 banks while another two banks (Unity bank Plc and Stanbic IBTC Bank) were dropped for insufficient data records. The remaining 10 banks that met all the criteria were used as the sample size of the study. (Access bank, Fidelity bank, First bank, FCMB, GTB, Sterling bank, union bank, UBA, Wema bank and Zenith bank Plc.).

Data was obtained from secondary sources and survey study of names of directors was carried out so as to determine their backgrounds. The data was collected from the published financial statements of the sampled firms covering the period of ten years (2010-2019). In analyzing the collected data, descriptive, panel unit root and multiple regression analysis will be used. The technique will be made possible with the use of the Stata-10 package. This technique is in line with that adopted by Marimuthu (2008), Omoye and Eriki (2013) and Ujunwa *et al.*, (2012).

Model Specification

The model takes the form:

$$ROE = \beta_0 + \beta_1 BN + \beta_2 BG + \beta_3 BE + \beta_4 BS + e_{it} \dots\dots\dots (i)$$

Where:

$\beta_0, \beta_1, \beta_2, \beta_3, \dots\dots\dots \beta_5$ are parameter coefficients estimated with our expectation.

ROE = Return on Equity

β_0 = Constant

BN = Board Nationality

BG = Board Gender

BE = Board Ethnicity

BS = Board size

e = error term

it = Combination of firms and time.

ROE is an indicator of performance which enable users to determine the performance of the organization and the effectiveness of the corporate governance in securing the organizational objectives (Epps & Cereola 2008). ROE was successfully used by Arumona (2018), Matanda, Oyuji and Lisiolo (2015), Tukur and Abubakar, (2014) and Bilal, Muhammad, Muhammad, Hafiz and Arshad, 2013).

RESULT AND DISCUSSION

Here, the result of data analysis is presented and it commences with the analysis of the data using descriptive statistics, followed by the presentation of the result of the model estimation. Panel Multiple regression has been used to estimate the relationship between the independent variables (board nationality, board gender and board ethnicity) and dependent variable (Return on Equity). This is concluded with the discussion of major findings and policy implication of the findings.

Table 1: Descriptive Statistics of the Variables

| <i>Var</i> | <i>Obs</i> | <i>Mean</i> | <i>StdDev</i> | <i>Min</i> | <i>Max</i> | <i>Skew</i> | <i>Kurtosis</i> |
|------------|------------|-------------|---------------|------------|------------|-------------|-----------------|
| ROE | 100 | 7.0547 | 5.91197 | 0.24 | 21.83 | 1.022 | 0.052 |
| BN | 100 | 5.8552 | 9.76483 | 0.00 | 33.33 | 1.465 | 0.947 |
| BG | 100 | 8.0042 | 8.13821 | 0.00 | 33.33 | 0.727 | -0.201 |
| BE | 100 | 0.8678 | 0.21770 | 0.33 | 1.00 | -1.426 | 0.826 |
| BS | 100 | 14.1136 | 3.33367 | 7.00 | 22.00 | -0.52 | -0.109 |

Source: STATA 10 Result (2021)

The table presents the descriptive statistics for the dependent and independent variables (ROE Return on Equity, BN-Board Nationality, BG-Board gender, BE-Board Ethnicity). The average number in the boardroom is 14.11 with a minimum of 7 board members and a maximum boardroom of 22 directors. One issue noteworthy is that the average percentage of female representation among the Board of Directors is remarkably low with only 5.8% and standard deviation of almost 10. From the table, ROE has a relatively high average of 7.05% with a standard deviation of 5.92. Meaning that the average Nigeria listed deposit money banks perform well especially, with some banks earning as much as 21.83% return on their equity. On board ethnicity, the result shows that 87% of banks in the observation have ethnically diffused boards while just about 13% are homogeneous. This can be seen in the table where board ethnicity is about 0.8678 with a standard deviation of 0.217. Also, the minimum and maximum values of the variables are ROE (0.24, 21.83) BN (0.00, 33.33), BG (0.00,33.33) and BE (0.33, 1). Finally, the skewness reveals that data obtained for all variables are normal. While result of the normality test indicates the normality of data and further enhances the validity of the regression result.

Test of Hypothesis

H0₁. Board nationality, board gender and board ethnicity of board members has no significant effect on the Return on Equity (ROE) of listed deposit money banks in Nigeria.

Table 2 and 3 depicts the model summary and regression result respectively while original output has been attached to the appendix. The summary of the overall result of directors' heterogeneity as presented in table 2 shows the R, R-square, adjusted R- square and Durbin Watson.

Table 2: Model summary of the study

| <i>Model</i> | <i>R</i> | <i>R-Square</i> | <i>Adj R²</i> | <i>Std Error</i> | <i>F Change</i> | <i>Sig</i> | <i>DW</i> |
|--------------|----------|-----------------|--------------------------|------------------|-----------------|------------|-----------|
| 1 | 0.651 | 0.423 | 0.388 | 4.625 | 12.036 | 0.000 | 1.914 |

Source: STATA 10 Regression result (2021)

In table 2, R explains the relationship between the explained and the explanatory variables. This is explained up to 65% showing that director's heterogeneity is positively and strongly related to profitability of listed deposit money banks in Nigeria. The coefficient of determinations reveals a value at 0.423 indicating that board heterogeneity explains upto 42% of the variation in performance of listed deposit money banks in Nigeria and the remaining 58% is covered by the other factors that are beyond the scope of this study. The adjusted R square is 39% which further indicates the fitness of the model.

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Finally, the summary of the model shows that the model is fit and that all explanatory variables have been carefully selected as this is confirmed by our f-statistics of 12.036 with a significant value of 0.000 which is significant at 5%.

Table 3: Board Heterogeneity and Firm Performance

| <i>Var</i> | <i>Beta</i> | <i>Std Error</i> | <i>T-Values</i> | <i>P-Values</i> |
|-----------------|-------------|------------------|-----------------|-----------------|
| Constant | 1.345 | 2.638 | .510 | .611 |
| BN | -.165 | .051 | -3.204 | .002 |
| BG | .112 | .067 | 1.667 | .099 |
| BE | 6.717 | 2.721 | 2.469 | .016 |
| BS | -.411 | .181 | -2.266 | .026 |

Source: STATA 10 Regression Result (2021)

Regression result indicates that boardnationality as measured by ratio of foreign directors to board size is negatively related to performance and statistically significant at 5% level in determining the profitability of listed deposit money banks in Nigeria which is consistentwith our apriori expectation. Beta value shows -0.273 with a significant value of 0.002. This implies that the higher the boardnationality, the lower the reported ROE. This result indicates that for every one-point increase in foreign director, performance (ROE) reduces by 0.273. Thereason for this negative impact between boardnationality and firm performance is the cost involved as a result of physical distance of foreign directors and the company. Another reason is the fact that they may come from a country with different culture and languages which might pose difficulty in communicating with other directors and monitor managers. This result is consistent with the findings of Miletkov, Poulsen and Wintoki (2012), Masulis, Wang andXie (2010) and contradicts the studies conducted by Ujunwaet *al.*, (2012), Zainal, ZulkifliandSaleh (2013). The regression result in respect of association between boardgender and firm performance shows that women are significant and positively impacting on banks performance as the beta value stands at 0.154 and significant but at 10%. Despite the fact that our descriptive statistics result shows that women representation is low; their impact is still felt on the performance of the listed deposit money banks in Nigeria. This outcome could be explained by acknowledging that women are mostly found to be particularly good at defining responsibilities clearly as well as being strong on mentoring and coaching employees(Credit Suisse Research Institute, 2012). Similarly, the presence of women on the corporate boards seems to increase the boards' effectiveness through reducing the level of conflicts among the Board of Directors and employees as well as ensuring a high quality of performance (Nielsen &Huse, 2010). The regression result of boardethnicity is found to be significant and positively impacting on banks performance in Nigeria. The beta value of at0.247 is significant at 5% (P-value =0.016). This indicates that for every unit increase of ethnic diversity, performance increase with about 0.25 points. This could be as a result of ethnic diversity being more efficient in providing solution to ill-defined and noble problems in which diversity of opinion, knowledge is required which allows for a thorough examination and alternatives (Filley, House & Kerr, 1976). Selecting director with different ethnic background also provides opportunities to tap into diverse human and material resource needed for growth and expansion of a company.

Discussion of Findings

The findings of this study contribute to a better understanding on the mix of directors so as to improve the financial performance of Listed Deposit Money Banks in Nigeria. Return on Equity (ROE) and three other variables which represent board nationality, board gender and board ethnicity with two control variables which include board Size and Total Assets. All these factors were put to test in order to identify the possible Board of Directors composition that can improve the performance of listed deposit money

banks in Nigeria. The result shows that board gender, board ethnicity and board nationality are most important form of demographic heterogeneity that affects the financial performance of listed deposit money banks in Nigeria. The result indicates that only board nationality has a negative relationship with ROE while board gender and board ethnicity show a positive relationship. Based on the empirical analysis, result showed that board nationality is significant and negatively influencing ROE. This implies that banks only benefit more from Foreign Directors expertise when they sought to have larger operations in the foreign directors' home region. But since our result is negative, it means that listed deposit money banks in Nigeria has little or no strong business in their Foreign Director's home region and this indicates that in such instances, the cost of Foreign Directors slack monitoring outweighs the benefits from their expertise. Another reason for the negative significant is the proximity of Foreign Directors to constantly attend meetings, and this hinders them from contributing positively to the performance of the company. Furthermore, the effect of board gender i.e. female on the performance of listed deposit money banks in Nigeria as indicated by our empirical evidence showed significant positive relationship between board gender and firm performance. The result will not necessarily be positive and significant under conditions where status differentials between decision makers either prevent women from being heard or keep their perspective from being influential. The, allusion here is that there is little or no status differentials between decision makers be it a woman, this further explains that women are not mere directors but directors that have been heard and their perspective are regarded influential.

A critical reason for this outcome is the fact that women bring a number of strength to the board especially in the area of corporate social responsibility and participative decision making styles. These benefits contribute enhance corporate social responsibility rating which inturn increases patronage from existing and potential customers and thus positively influence the performance of listed deposit money banks in Nigeria. The research study also reveals that board ethnic heterogeneity is significant and positively affecting the performance of listed deposit money banks in Nigeria. The implication here is that Nigerian banks needs to venture more into balancing the ethnic heterogeneous composition of their corporate boards. This is because an ethnically diffused board enhances the effectiveness of the board actions and in turn increases productivity. Since shareholders are mostly interested in returns on their investments, then much attention should be given to the ethnic diversity of their Board of Directors. This finding is consistent with those reported by Eriki and Omoye (2013), Marimuthu and Kolandiasamy (2009), Marimuthu (2008), Miller and Triana (2009), Olaoti (2012) but contrary the findings of (Ujunwaet *al.*, 2012).

CONCLUSION AND RECOMMENDATIONS

The study provides statistical and empirical evidence by using three independent variables that constitutes demographic board heterogeneity: Board nationality, board gender and board ethnicity in explaining and predicting the performance of sampled banks. In view of our findings, the study concludes as follows; Firstly, board nationality has a negative impact on banks financial performance because of their proximities of being absent during board meetings and this is among the reasons for their negative impact because they will not be able to physically monitor and contribute their expertise to the affairs of the banks. Secondly, board gender has a significant positive relationship with banks financial performance.

These may be because women bring a number of strength to the board in area of Corporate Social Responsibility (CRS) and this increases their customer base and better their financial performance. Thirdly, board ethnicity has a significant positive relationship with financial performance of listed deposit money banks in Nigeria. Board ethnicity indicates how heterogeneous banks' board is in terms of local representative. It is concluded here that ethnic heterogeneity is an essential ingredient in board composition as it helps firms tap into numerous human resources available to it. Lastly, the result provides some novel insight for absolute understanding of ingredients of board heterogeneity that determine the financial performance of listed deposit money banks in Nigeria. Our estimation results confirm the Upper Echelon Theory on Board of Directors heterogeneity. We considered periods within

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the period of 2005-2012 which is a period when numbers of changes and reforms have been witnessed by the banking industry.

From the foregoing therefore, the following recommendations are being put forward. Firstly, the findings point to the monitoring deficiencies of foreign directors and that they undermine the effectiveness of board oversight functions and contribute to more managerial slack and misbehavior. In view of this, it is recommended that a balanced approach towards the hiring of Foreign Directors by Listed Deposit Money Banks in Nigeria and that a careful cost benefit analysis warranted in such situations. Secondly, like Norwegians Bank regulatory bodies in Nigeria should encourage companies to increase the number of women on their boards. Also, it appears that as firm size increases, the dynamic of board in terms of board gender changes resulting to the detriment in some key department banks. Therefore, future researches should consider the role of women on boards and dynamics of their presence on the board which requires an observational and qualitative study. Thirdly, Ethnic composition of Board of Directors of listed deposit money banks in Nigeria should be integrated into the corporate governance practices as allowing for a more ethnic balance translates into better financial performance.

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Effect of Audit Quality on Earnings Management of Listed Oil and Gas Marketing Companies in Nigeria

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Abstract

This study examined the effect of audit quality proxied by audit firm size, auditor industry specialization, auditor tenure, and audit committee financial expertise on earnings management represented by discretionary accruals of listed oil marketing companies in Nigeria. The study also examined the effect of the interaction between audit committee financial expertise and auditor industry specialization on earnings management of sampled firms. To achieve these objectives, the study used fourteen listed oil marketing companies that had consistently published their audited annual financial reports from 2011 to 2020, and analyzed the data using multiple regression technique. The dataset was first analyzed using pooled-OLS regression technique. However, in view of the panel nature of the dataset, it was further analyzed using fixed and random effects regression models. The result of the fixed effect regression analysis revealed that audit firm size, auditor industry specialization, and audit committee financial expertise are positively associated with earnings management at less than 5% significance level respectively. In contrast, auditor tenure and the interaction between audit committee financial expertise and auditor industry specialization were negative and significantly associated with earnings management of firms at less than 5% significance level respectively. Overall, the study concluded that audit quality attributes of audit firm size, auditor industry specialization, auditor tenure, audit committee financial expertise and the interaction between audit committee financial expertise and auditor industry specialization had significant effect on earnings management of listed oil and gas marketing companies in Nigeria. In view of the results, the study recommended among others auditor tenure of three years and above in order to check earnings management of firms in Nigeria. Also, auditor industry specialization should be encouraged by regulators such as SEC as the interaction between audit committee financial expertise and auditor industry specialization mitigates earnings management of firms in Nigeria.

Keywords: Auditor industry specialization, Audit Tenure, Audit Committee Financial Expertise, Audit Firm Size, Earnings Managements

INTRODUCTION

Financial reporting is one of the primary responsibilities of management which enables them give account of their stewardship. Managers of public companies are expected to prepare and present annual financial reports to shareholders, who are owners of the firm and other interested users such as creditors, analysts, government, and the general public to enable them assess the performance and financial position of the reporting entity. The main objective of financial reporting therefore is the provision of information on the financial performance and position of the reporting entity that is useful to different users, to enable them assess the stewardship of management and make informed economic decisions (International Accounting Standards Board (IASB), 2008; Glautier, Underdown, & Morris, 2011). This

means that published financial reports that fail to meet the information needs of its users do not achieve their intended purpose. In order to achieve this objective, information contained in financial statements has to meet basic qualitative attributes of relevance and faithful representation in addition to quantitative attributes. Relevance of financial statements information is associated with the extent to which published financial information is able to influence the decision of the users. Faithful representation on the other hand entails that published financial statements information should be verifiable, neutral and complete (IASB, 2008).

The need for financial reporting arises originally because of the separation of ownership from management and control in modern day business organizations. This relationship creates conflict of interests and information asymmetry between the shareholders (principal) and managers (agent), who are involved in the day to day running of the firm. The conflict sometimes reflects in the preparation of financial statements as managers use their discretion over accounting choices to manipulate financial information contained in published financial reports for their personal benefit at the expense of other stakeholders. Reported accounting information is, therefore, often not free from complete bias as expected by different users of the financial reports. In Nigeria, the oil and gas sector contribute significantly to the economic growth of the country. According to the Central Bank of Nigeria (CBN, 2010), the industry contributes about 90% of Nigeria's foreign exchange earnings. Despite its strategic importance, the operations of the oil industry have been associated with allegations of scandalous financial practices recently. For example, the Punch (February, 2015) reported the case of non-remittance of funds to the federation account and excessive expenditure of oil proceeds by the Nigerian National Petroleum Corporation (NNPC). Similar allegations are associated with listed oil marketing companies in Nigeria as exemplified by the case of African Petroleum (now Forte Oil) Plc, where a credit facility of 24 billion naira was not disclosed in the financial statements of the company (Samaila, 2014). Interestingly, this material omission occurred under the watch of a big 4 audit firm that is expected to constrain such unscrupulous practice.

Owing to the importance of the oil sector to the economy of Nigeria and the allegations of manipulative tendencies labelled against the oil and gas industry, it is imperative to examine the earnings management behaviour of oil and gas marketing companies and the extent to which audit quality affects such behaviour. This study is therefore motivated by the fact that researches in this area which are mostly foreign based documented inconsistent and mixed findings due largely to jurisdictional and sectoral differences. The inconclusiveness of findings has provided incentive for further research effort. In addition, the fact that the oil sector in Nigeria has undergone a number of reforms particularly from 2009, coupled with dearth of local empirical studies on the association between audit quality and earnings management practices of the sector, make a study that will enable better understanding of the nature and extent of the association more desirable. Also, most of the prior studies on audit quality and earnings management in Nigeria such as Okolie, Izedonmi and Enofe (2013) and Okolie (2014) focused more on audit firm size, audit fees and auditor tenure even though the literature has listed other proxies of audit quality. This approach limits the generalisability of findings concerning the effect of audit quality on earnings management of firms in Nigeria in general and listed oil marketing companies which have been ignored by prior studies. A study that includes more variables such as auditor industry specialization is undoubtedly desirable as it provides a better understanding of the effect of audit quality on earnings management of firms in Nigeria. Though this study does not cover all the variables ignored by previous studies, the inclusion of more variables such as auditor industry specialization is important as it enables us to determine the effect of the interaction between auditor industry specialization and audit committee financial expertise on earnings management of firms in Nigeria.

Furthermore, the two studies in Nigeria focused on non-financial companies listed on NSE generally, and not specifically in relation to oil and gas marketing companies. The importance of oil and gas marketing companies to the Nigerian economy as evidenced in the large volume of trade in shares on the floor of the NSE, implies that these companies deserved to be studied in isolation for better understanding of their

earnings management behaviour. In addition, the association of the operations of these companies with scandalous financial activities such as the case of African Petroleum (Now Forte Oil) PLC, where a credit facility of 24 billion naira was not disclosed in the financial statements (Samaila, 2014) raises concerns about the possibility of serious earnings manipulation in the companies. This calls for empirical investigation into the earnings management behaviour of oil and gas marketing companies in Nigeria and the extent of its association with audit quality. It is against this background that the present study is set to fill the gaps identified in the audit quality and earnings management literature by extending its analysis to cover audit firm size, auditor industry specialization, auditor tenure, audit committee financial expertise and the interaction between audit committee financial expertise and auditor industry specialization by focusing on oil and gas marketing companies in Nigeria in view of their strategic importance to the nation's economy. From the foregoing therefore, the following hypotheses are formulated:

H0₁: Audit firm size, Auditor industry specialization, Auditor tenure, and Audit committee financial expertise have no significant effects on earnings management of listed oil and gas marketing companies in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Concept of Audit Quality

Setyaningrum, Gani, Martani and Kuntadi (2013) say that audit quality is extracted from the principal component analysis techniques and outcomes indicate three major factors such as education, experience and training. The greater the auditor monitoring strength, the more closely financial report will reflect the true economic circumstances of the client and the higher information quality. Kaklar, Kangarlouei and Motavassel (2012) view audit quality as an auditor who will detect and correct or reveal any material omission or misstatements in the financial statements in order to give high quality report. There are two major drivers of audit quality such as litigation costs and reputation loss which considers large investment on building their brand name, the big audit firms have an incentive to lower litigation risk and protect their reputational capital by providing more credible financial reports to the users of the accounting or financial information. It is expected that high audit quality lead to high financial reporting quality which in turn is a tool to prevent financial crises globally. In other to maintain the quality of audit report presented to the users of the financial information from companies, the professional bodies made the most critical decision that all auditors and members of professional bodies must show high level of integrity because they are the builders of societies, the organizers of economies, the transformers of social systems and those who make the political system. In the opinion of Al-Matari, Al-Swidi and Fadzil (2014), audit quality is internal audit which determines the reliability, reality, and integrity of financial and operational information that comes from different organizational units, on which appropriate business decisions at all levels of management are based. Ahmad, Suhara and Ilyas (2016) add that audit quality is related to the quality and effort of the auditor to identify material misstatement in the financial statements. It also concerned with the auditor willingness to disclose an unbiased audit report based on the audit result.

Sayyar, Basiruddin, Rasid and Elhabib (2016) view audit quality as those technics the auditors use to recognize misstatements in clients accounting system or information and report the misstatements to the appropriate person. The quality of audit reports is a basic requirement to enhance the credibility of financial statements within the stakeholders to reduce investors risk in the organization. Therefore, it is a basic ingredient in enhancing the credibility of financial statements to users of accounting information by providing an independent verification of financial reports presented by management. Okolie, Izedonmi and Enofe (2013) identify audit quality as the assessment of the financial statement by an auditor in order to discover any breach in the clients accounting data and report the breach to the general public. It will further influence the financial reporting and strongly impact on investors' confidence in the audited financial reports. In my own view, audit quality is a measure of professional training, competence, skill

and experience that was brought to bear on an audit assignment. It is a mirror through which total personality of an auditor or audit firm is assessed. Both professional bodies and the public can, to a large extent, rely on it for an unbiased evaluation. The aforementioned definitions clearly suggest that accountants are yet to agree on a single definition for audit quality that suits all purposes. Consequently, and following DeAngelo's initial definition, this study views audit quality as the joint probability that a given auditor both detects and reports a violation of GAAP in the accounting system of the client. This study adopts DeAngelo's definition of audit quality in view of the fact that it captures the fundamental elements of quality audit which are competence and independence of the auditor. Competence is associated with the ability of the auditor to detect violation of GAAP in the accounting system of a client while independence is what makes the auditor to report the said violation of GAAP.

Earnings Management

The accounting literature is yet to provide a universally accepted definition of the term "earnings management". Earnings management is called by several names such as accounting numbers game (Mulford & Comiskey, 2002), creative accounting (Balaciu, Bogdan & Vladu, 2009), income smoothing (Tucker & Zarowin, 2006), and so on. The concept of earnings management is defined differently by different researchers, depending on how they perceive it. Healy and Wahlen (1999) associated earnings management with the altering of financial statements through the use of judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers. According to Schipper (1989), earnings management involves „disclosure management“ in the sense of a purposeful intervention in the external financial reporting process, with a view to obtain private gain for shareholders or managers. To Fields, Lys and Vincent (2001), earnings management arises when managers exercise discretion over accounting numbers, with or without restrictions. The discretion is exercised to either maximize firm value (shareholders wealth) or to maximize the selfish interest of managers (opportunistic earnings management). The definition of Fields, Lys and Vincent (2001) unlike the first two definitions suggests that earnings management could either be within or outside GAAP.

Generally, earnings management involves different activities ranging from legitimate to outright fraudulent financial reporting. These activities can be broadly classified into four major types (Bauwhede & Willekens, 2003; Zhao, 2012). The first type of earnings management arises from the exploitation of flexibilities in accounting principles (GAAP), commonly called within- GAAP earnings management. GAAP allows flexibilities to enable firms prepare financial statements that reflect underlying economic reality. However, some managers abuse these accounting flexibilities through earnings manipulation. Examples of flexibilities in GAAP include choosing between various inventory valuation techniques and depreciation methods. This type of earnings management is perceived by some scholars as legitimate and beneficial to shareholders particularly, when it is well disclosed in the financial statements. The second group of earnings management activities involves violation of accounting principles (GAAP). It is called “with-out GAAP” earnings management. Earnings management of this nature involves outright management fraud and is mostly associated with firms that have exhausted flexibilities in accounting principles to manage earnings. Dechow and Skinner (2000), call this form of earnings management fraudulent financial reporting. Fraud is defined as “ the intentional, deliberate misstatement or omission of material facts, or accounting data, which is misleading and, when considered with all other information made available would cause the reader to change or alter his or her judgment or decision” (The National Association of Certified Fraud Examiners, 1993). Unlike “within GAAP” earnings management, this type of earnings management lacks legitimacy and is not disclosed in the financial statements. This is the type of earnings management activities that normally attract auditors and regulatory sanctions. The third classification of earnings management activities is called real activities manipulation. This is also a within-GAAP earnings manipulation but is different from earnings management through accounting choices and is hardly subjected to auditor scrutiny. Earnings

management through real activities manipulation involves “management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain earnings thresholds (Roychowdhury, 2006). Examples of real activities manipulation include but not limited to earlier spending on maintenance or research and development (R & D) when reported earnings are higher than expected to reduce earnings number to desired level. The fourth group of earnings management activities is called classification shifting. Classification shifting is another form of within-GAAP earnings manipulation which entails “misclassifying line items within the income statement to inflate core earnings (Zhao, 2012). An example of classification shifting is the shift of core expenses such as selling, administrative and general expenses to special items such as restructuring charges.

Empirical Review

Omoriegie and Dibia (2020), explored the impact of audit firm attributes and audit quality in Nigeria. For the study objective to be accomplished, the study fundamentally embrace the survey of panel data in order to properly scrutinize the concept of audit firm attributes as it relate to audit quality in Nigeria for the period of 5-years (2014-2018). Fifteen (15) companies from the banking industries were used in total. Due to the cross-sectional nature of the study, the panel multiple regression was employed with the aid of E-view 8.0 econometric packages for the analysis of data. The result of the findings appears that the variable of Audit Independence (AUDI) and Audit Fees (AUDE) were observed to be significant and positively related with Audit Quality (AUDQ), Audit Firm Rotation (AUFR) was positively and insignificantly related with Audit Quality (AUDQ) while Audit Delay (AUDY) indicated a negative and a relationship that is insignificant with Audit Quality (AUDQ). In view of the findings, the study therefore strongly recommends that audit independence and audit fees should be given more attention in the course of considering the attributes of audit firm as well as the quality of audit in Nigeria. Udeh, Chinedu and Okwo (2020), investigated the influence of attributes of audit quality on return on assets of selected quoted manufacturing firms in Nigeria from 2006 to 2016. Its specific objectives were to examine the effect of audit firm size and auditor's tenure on return on assets of quoted manufacturing firms. Ex-post facto research design was employed. Secondary data from published financial statements of 24 out of the 80 quoted manufacturing firms on the Nigerian Stock Exchange were used. Stratified purposive random sampling technique was utilized to select the sample size. Ordinary Least Square statistical method was the analytical tool. It was discovered that audit firm size had a positive and significant effect on return on assets of quoted manufacturing firms in Nigeria, among others. It was therefore, concluded that attributes of audit quality influence return on assets of quoted manufacturing firms in Nigeria. The study recommended, in addition to others, that auditors should be given subsequent opportunities for any audit assignment as this will enable them to discover inadvertent errors thereby improving the quality of the audit.

Nwoye, Anichebe and Osegbue (2020), undertook a study to determine the effect of audit quality on earnings management in insurance companies in Nigeria with special consideration on accruals and performance measures of earning manipulations using insurance companies in Nigeria. Preliminary analyses were conducted, such as descriptive statistics and correlation matrix. In analyzing the data, the study adopted panel multiple regression to identify the possible effects of audit quality on earnings management of financial institutions in Nigeria. We interpreted fixed effect analysis after using Hausman test. The result shows that audit quality had a significant effect on earnings management. The conclude that longer stay of auditors in financial institutions increases accrual and performance manipulation. However, financial institutions audited by the Big 4 auditing firms are associated with less accrual and performance earnings manipulation while financial institutions that have executive and non-executive directors as members of audit committee have greater accrual and performance earnings manipulations. Higher number of financial experts in audit committee increases accrual manipulation while higher number of experts with accounting background in audit committee reduces performance manipulating. Finally, increase in auditors' fee leads to choices of using accounting methods to manipulate both accrual and performance earnings. Therefore, the study recommends that, financial institutions should have

maximum number of years for auditors to stay. They should focus more on increasing the number of experts with accounting background in audit committees. Accounting bodies should regulate auditors' fee in line with the size of the financial institution. Mustapha, Rashid, Abdullahi and Ademola (2019), examined the effect of Audit Quality on Accruals Earnings Management in Nigerian Listed Firms. Audit Quality is one of the tool academicians' use in measuring the level of earning practices in the organizations. However, this study investigated the possible effect of audit quality towards the change of earnings management level among the Nigerian listed firms. The study used all the public listed firms in the main flow of the Nigerian Stock Exchange (NSE) as a population from the year 2012 until 2017. Sixty-three selected companies were selected as a sample based on the filtration criteria of the study. The financial data was obtained from the Thompson Reuters DataStream, and the corporate governance data was from the annual reports and accounts of the companies. Audit quality and accrual model was used to test the relationship between the study variable. The study applied multiple regression to test the model. It was revealed from the regression that audit quality is negatively significant with accrual earnings management. This finding is indicating that any increases in the unit of audit fees will decrease the earnings management of the selected firms. Thus, the finding is supporting agency theory and is contrary to the assumption of creative accounting theory. The result of this study will assist the relevant authorities in decision making and policy setting towards the best practices of the Nigerian listed firms. Therefore, this study is recommending for further research on this area to employ more measures of audit quality and also to apply the use of other earnings management indicators in order to have the robustness of the study. Asiriwa, Aronmwan, Uwuigbe and Olubukola (2018). Examined audit committee attributes and audit quality with emphasis on the specific requirements of the 2011 SEC code. The study applied the deductive approach via the ex-post facto research design and the Binary probit regression model in analyzing the various hypotheses put forward in study. Data used for the study were gathered for 150 firm-year observations from the annual reports of quoted companies on the floor of the Nigerian Stock Exchange. Findings from the study revealed that audit committee size, frequency of meetings, number of expertise and overall effectiveness all have a positive relationship with audit quality. However, only size and overall effectiveness was significant in their relationship. The study recommends that since the significant positive nature of audit committee effectiveness show that four attributes jointly account for effectiveness, firms are encouraged to establish audit committees that have all these attributes. Furthermore, the requirement of having a 6-member audit committee is sound and empirically proven to aid audit quality. Therefore, firms yet to subscribe to these should hasten up, while sanctions should be made for firms that do not.

Theoretical Framework

Stewardship Theory

Stewardship theory was introduced by Donaldson and Davis (1994). The stewardship theory which has its roots in psychology and sociology maintains that the interests of managers (stewards) are aligned with those of the organization and the owners (Albrecht, Albrecht & Albrecht, 2004). The theory focuses on mechanisms that empower and facilitate the functioning of stewards rather than structures that monitor and control agents. Stewardship theory rejects the policeman attitude of the agency theory which assumes that the interests of principal and the agent are different, and sees agents as self-serving and self-centered (Habbash, 2010). The stewardship theory suggests that managers as representatives of shareholders are trustworthy and good stewards of resources entrusted to them and therefore need no monitoring (Donaldson, 1990; Donaldson & Davis, 1994). The theory posits that since managers are not opportunistic and act in the best interest of the owners, they should be given autonomy based on trust as this will reduce the cost of monitoring and controlling their behavior. Stewardship theory views monitoring of agents by the owners, and their representative as unnecessary, since managers are not opportunistic and will always act in the best interest of shareholders. Stewardship theory further argues that corporate executives are not only concerned with financial gains but by nonfinancial motives such as recognition from peers and bosses, and satisfaction from performing challenging tasks (Donaldson &

Davis, 1994). Consequently, the stewardship theory attracted several criticisms by those who believe that the interests of managers cannot be aligned with the interest of shareholders. Critics argue that monitoring mechanisms such as high-quality external auditors are necessary in cutting information asymmetry between shareholders and managers, in order to reduce agency costs such as earnings management. Heralding this argument is Albrecht *et al.* (2004) who contend that relying on the relationship between owners and stewards based on stewardship theory could rather provide opportunities for management to commit fraud. This theory therefore fails to sufficiently explain and analyze the relationship between audit quality and earnings management of firms.

Agency Theory

Agency theory was developed by Jensen and Meckling (1976). The agency theory is based on the relationship between the principal (owners) and the agent (Managers). Though the stakeholder theory has more theoretical and practical appeal than agency theory, and stewardship theory, it is also heavily criticized because of the difficulty to treat equally and satisfy the competing demands of the multiple stakeholders in the firm as proposed by the stakeholder theory. The theory therefore, fails to adequately explain the association between audit quality and earnings management practices. The agency theory is based on the relationship between the principal (shareholder) and the agent (managers). The separation of ownership from management and control in modern day business corporations provides the basis for the function of agency theory. This separation provides the opportunity for an agent (manager) to be appointed to manage the daily operations of the company. This relationship however, creates the potentials for conflicts of interests between the agent and principal, and requires monitoring costs associated with resolving these conflicts (Jensen & Meckling, 1976).

Agency theory assumes that managers are motivated by their personal gains and work to exploit their personal interest and not the interest of the shareholders. Managers for instance may be interested in buying lavish offices, company cars and other extravagant items, since the cost of these items is not borne by them (managers) but the owners (shareholders). The main problem of agency theory is how to align the conflicting interests of the managers with the interests of shareholders. Consequently, when managers have incentives to manage earnings such as to meet or beat earnings target and performance-based compensation, they manipulate the company's reported earnings. This manipulation reduces the relevance and reliability of reported accounting earnings and financial statements generally. Agency theory therefore suggests monitoring mechanisms such as high quality audit to reduce these conflicts and align the interests of managers with the shareholders interests. From the foregoing, agency theory explains better and clearer unethical practices in accounting and financial issues such as earnings management (EM). This study therefore draws on agency theory to test the relationship between audit quality and the incidence of earnings management in listed oil marketing companies in Nigeria. Agency theory is chosen because it better explains the motivation for earnings management and the association between audit quality as a monitoring mechanism, and earnings management than the other theories.

METHODOLOGY

The longitudinal panel research design was adopted for this study based on positivist approach. The population of the study is all the fourteen (14) oil and gas companies quoted on the Nigerian Stock Exchange before 1st January, 2011 and had been trading till 31st December, 2020. The period covered by the study is twelve (10) years from 2011-2020. The sample size of the study comprises the entire population of fourteen (14) oil and gas companies. The data for this study were obtained from secondary source. Secondary data were extracted from the published annual reports and accounts of the companies and the NSE fact book for the relevant years. Descriptive statistics will be used to compute summary statistics for both the dependent and independent variables of the study. The study also used panel multiple regression analysis to show the nature, direction and extent of the relationship between and among the dependent and independent variables. The model in this study was adopted and modified from the studies of Molik *et al.* (2013) and Okolie *et al.* (2013). The model is expressed as follows:

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$$DAC_{it} = \beta_0 + \beta_1 AFS_{it} + \beta_2 AIS_{it} + \beta_3 ADT_{it} + \beta_4 CLI_{it} + \beta_5 AFE_{it} + \beta_6 AFE * AIS + \varepsilon_{it} \quad \text{--- (i)}$$

Where:

DAC = Discretionary accruals

AFS = Audit firm size

AIS = Auditor industry specialization

ADT = Auditor tenure

AFE = Audit committee financial expertise

β_0 = constant of the model

$\beta_1 - \beta_6$ = coefficients of the study model

ε = error term

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics of the dataset from the sampled oil and gas marketing companies are presented in Table 1 where the mean, standard deviation, minimum and maximum values of the data for the variables used in the study are described.

Table 1 Descriptive Statistics

| VARIABLE | N | MEAN | STD. DEV | MIN. | MAX. |
|----------|-----|----------|----------|--------|----------|
| DAC | 140 | .1004662 | .0544201 | .00017 | .278911 |
| AFS | 140 | .6851852 | .4688031 | 0 | 1 |
| AIS | 140 | .5185185 | .5043487 | 0 | 1 |
| ADT | 140 | .5740741 | .4991257 | 0 | 1 |
| AFE | 140 | .1450617 | .1038882 | 0 | .3333333 |
| AFE*AIS | 140 | .0648148 | .0966779 | 0 | .3333333 |

Source: STATA Output Result (2021)

Table 1 presented the descriptive statistics for the dependent and independent variables (DAC = Discretionary accruals, AFS = Audit Firm Size, AIS = Auditor Industry Specialization, ADT = Auditor Tenure, AFE = Audit Committee Financial Expertise and AFE*AIS = Interaction between Audit Committee Financial Expertise and Auditor Industry Specialization). The standard deviation of the variables ranges from 0.05 to 0.50. Discretionary accruals have the lowest standard deviation of 0.05 followed by the interaction between audit committee financial expertise and auditor industry specialization 0.09, audit committee financial expertise 0.10, audit firm size 0.46, auditor tenure 0.49 and auditor industry specialization 0.50. The relatively low standard deviation for all the study variables may be an indication that the sampled data for the study is normally distributed. The Table also indicated an average value of 0.10 for discretionary accruals. Since earnings management is measured by absolute value of discretionary accruals in this study, the value of 0.10 is an indication that sampled companies were involved in minimal earnings manipulations during the study period. The minimum and maximum values of discretionary accruals during the study period are zero (0) and 0.28 respectively. These values imply that some sampled companies were actually not involved in earnings manipulations during the study period while the highest manipulation of earnings by the sampled companies during the study

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period stood at 0.28. This further corroborates the inference of minimal manipulation of earnings earlier revealed by the mean of DAC.

The Table further revealed an average value of 0.6851852 for audit firm size. The value implies that sixty-nine (69) percent of the sampled oil marketing companies was audited by the big 4 audit firms in Nigeria (KPMG, PWC, Ernst and Young, Akintola Williams Deloitte) during the study period. The mean value of sixty nine percent further suggests that only thirty one percent of the sampled oil and gas marketing companies were audited by non-big 4 audit firms in Nigeria during the period of investigation. This shows that the audit market in the sector is dominated by the big 4 audit firms in Nigeria and just a few non- big 4 audit firms audited listed oil and gas marketing companies in Nigeria. The minimum and maximum values of audit firm size during the study period were zero (0) and one (1) respectively. The minimum and maximum values of audit firm size indicate that auditor size is measured by a dummy variable which takes the value of one if the company is audited by a big 4 audit firm and zero if otherwise. Similarly, the Table shows that auditor industry specialization had a mean value of 0.5185185 during the study period. This value implies that fifty-two (52) percent of the sampled companies were audited by industry specialist auditors during the period of the study. The value further reveals that only forty-eight (48) percent of the sampled oil marketing companies were audited by non-industry specialist auditors during the period of study. The mean value of industry specialist auditors during the study period is slightly higher than the mean value of non-industry specialist auditors. The minimum and maximum values of auditor industry specialization stood at zero (0) and one (1) respectively because the variable was measured by dichotomous numbers of one if the sampled oil marketing company is audited by an industry specialist auditor and zero if otherwise.

The Table also indicated that auditor tenure had a mean value of 0.5740741 during the study period. This value indicates that fifty-seven (57) percent of the sampled oil and gas marketing companies retained their auditors for a period of three years and above. This shows that more than fifty percent of the audit firms in the sector enjoy long tenure which enables them to acquire client's specific knowledge and its financial reporting practices necessary for a more effective audit. The mean further implies that only forty three percent of the sampled companies may have retained their auditors for a period of less than three years during the study period. The minimum and maximum values of auditor tenure during the study period are zero and one respectively in view of the fact that auditor tenure was measured by a dummy variable which takes a value of one for companies which retained their auditors for a period of three years plus and zero if otherwise.

Moreover, the Table indicated a mean value of 0.1450617 for audit committee financial expertise. This value shows that only fifteen (15) percent of the sampled companies had their audit committee made of members who have accounting and finance experience. This further suggests that eighty five (85) percent of the sampled companies had audit committee members without accounting and financial expertise. The minimum and maximum values of audit committee financial expertise during the study period were zero (0) and 0.333 respectively. These figures indicate that some of the companies had no members with accounting and finance experience in their audit committee membership while some had over thirty-three (33) percent of the membership of their audit committee during the same period made of members with accounting and finance experience. Finally, the Table revealed a mean value of 0.0648148 for the interaction between audit committee financial expertise and auditor industry specialization. The mean value implies that the interaction between audit committee financial expertise and auditor industry specialization during the study period is an average of six (6) percent. The minimum and maximum values of the interaction between audit committee financial expertise and auditor industry specialization during the study period were zero (0) and 0.33 respectively.

Table 2: Summary of Regression Results from Different Models

| Variable | OLS | FIXED |
|----------|-----|-------|
| <hr/> | | |

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| | | | RANDOM |
|------------------|--------------|-------------|-------------|
| AFS | -.0030536 | .1561452*** | .0034529 |
| AIS | .0562648* | .0925595** | .0709208 |
| | | | ** |
| ADT | -.0393105*** | -.0273476** | -.0381286** |
| | | | * |
| AFE | .1694277 | .3054097** | .1835667 |
| AFE* AIS | -.2852075* | -.4013709** | -.3449638* |
| | | | * |
| CONS | .0544501* | -.1081198* | .0413093 |
| Chi ² | | | 17.12 |
| R ² | .2633 | .4389 | .2907 |

Source: STATA Output Result (2021)

Table 2 revealed that pooled- OLS regression has an R² of 0.26 which implies that 26% of variation in discretionary accruals of the firms is jointly explained by the independent variables. Under OLS regression result, auditor tenure and the interaction between audit committee financial expertise and auditor industry specialization had a significant negative relationship with discretionary accruals of sampled companies at 1% and 10% respectively. Auditor industry specialization had a significant positive relationship with discretionary accruals of the sampled firms at 5% and 10% respectively. Except audit committee financial expertise that has insignificant positive relationship, audit firm size had insignificant negative relationship with discretionary accruals of the sampled companies. The F- statistics of the OLS regression model was significant at 5%. This means, from the pooled- OLS regression result, only auditor tenure, auditor industry specialization and interaction between audit committee financial expertise and auditor industry specialization have statistically significant relationship with discretionary accruals of the sampled companies. The Table also revealed that the random effect result respectively returned coefficient values of 0.038 and 0.063 for auditor tenure. The coefficients are statistically significant at 1% and 5% respectively. Auditor industry specialization and interaction between audit committee financial expertise and auditor industry specialization had coefficient values of 0.07 and -0.34 significant at 5% respectively. In terms of coefficient of determination, the random effect result showed an R² value of 0.29. This shows that in so far as the random effect model is concerned, only 29% of the variation in discretionary accruals of sampled companies is explained by the combined effect of the independent variables.

On comparison of the results from the three models, fixed effect model appeared to have given a clearer picture of the relationship between the outcome and explanatory variables. This can be seen both in terms of number of independent variables that have significant relationship with discretionary accruals (audit firm size, auditor industry specialization, auditor tenure, client, audit committee financial expertise and interaction between audit committee financial expertise and auditor industry specialization) and coefficient of determination (R²). Interestingly, the direction of association between auditor tenure, interaction between audit committee financial expertise and auditor industry specialization and discretionary accruals of the sampled companies is negative in all the three models. Also, the direction of association with respect to auditor industry specialization, audit committee financial expertise and discretionary accruals is positive in all the three models. This indicates the consistency of the estimates in all the three cases.

Discussion of Findings

Based on the empirical evidence on the audit firm size has no significant effect on earnings management of listed oil and gas marketing companies in Nigeria is rejected. The present finding is consistent with those of Yasar (2013), Pouraghajan, Tabari, Emamgholipour and Mansourinia (2013) and Molik, Mir,

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Mclver and Bepari (2013) who found a positive association between audit firm size and earnings management of firms. The result however, contradicts the findings of Chen, Wu and Zhou (2006), Gerayli, Yanesari and Ma'atoofi (2011), Inaam, Khmoussi and Fatma (2012), Okolie, Izedonmi and Enofe (2013), Zhou and Guan (2014), Tyokoso and Tsegba (2015), Aliyu, Musa and Zachariah (2015) and Ching, Teh and San (2015) who documented a negative relationship between audit firm size and earnings management of firms. The result supports the finding of Zhou and Guan (2014) and Hegazy (2015) who found a positive relationship between auditor industry specialization and earnings management of firms. The result however, contradicts the finding of Habbash (2010), Gerayli, Yanesari and Ma'atoofi (2011), Inaam, Khmoussi and Fatma (2012), Ahmadzade, Hassanzadeh, Pooryegane and Ebrahimi (2012), Karimi and Gerayli (2014), Tyokoso and Tsegba (2015) and He (2015) who documented a negative association between industry specialist auditors and earnings management of firms. The result is inconsistent with findings in developed and some developing economies where auditor industry specialisation has significant negative relationship with earnings management of firms. Based on the empirical evidence, the second hypothesis of the study which states that auditor industry specialization has no significant effect on earnings management of listed oil marketing companies in Nigeria is rejected.

Based on the empirical evidence in respect of auditor tenure, which states that auditor tenure has no significant effect on earnings management of listed oil and marketing companies in Nigeria is rejected. The present result is consistent with the finding of Ebrahim (2001), Ahmadzade, Hassanzadeh, Pooryegane and Ebrahimi (2012), Inaam, Khmoussi and Fatma (2012), Okolie, Izedonmi and Enofe (2013), Okolie (2014), Karimi and Gerayli (2014), Tyokoso and Tsegba (2015) and Bamahros and Wan-Hussin (2015) who documented a negative relationship between auditor tenure and earnings management of firms. The result is however, inconsistent with those of Gul, Fung and Bikki (2009) and Ching, Teh and San (2015) who documented evidence of a positive association between auditor tenure and earnings management of firms. The present finding lends support to the study of Rohaida (2011) and Molik, Mir, Mclver and Bepari (2013) who found a positive relationship between audit committee financial expertise and earnings management of firms. The result is however, inconsistent with the studies of Piot and Janin (2005) and Bamahros and Wan- Hussin (2015) who found a negative relationship between audit committee financial expertise and earnings management of firms. Based on the result, the study rejects the fifth hypothesis which states that audit committee financial expertise has no significant effect on earnings management of listed oil marketing companies in Nigeria.

CONCLUSIONS AND RECOMMENDATIONS

Based on the result of data analysis and discussion in this study, the study has reached the following conclusions. The study provided empirical evidence on the association between audit quality (proxy by audit firm size, auditor industry specialization, auditor tenure, audit committee financial expertise and the interaction between audit committee financial expertise and auditor industry specialization) and earnings management (proxy by discretionary accruals) of listed oil and gas marketing companies in Nigeria. Specifically, the study concluded that audit firm size has a positive and significant effect on discretionary accruals of listed oil and gas marketing companies in Nigeria indicating that audit firm size does not constrain but increases earnings management of the sampled firms. The study also concluded that there is a positive and significant association between auditor industry specialization and discretionary accruals of listed oil and gas marketing companies in Nigeria suggesting that industry specialist auditors do not constrain but rather increases earnings management of sampled firms. Moreover, the study concluded that auditor tenure has a negative and significant effect on discretionary accruals of listed oil marketing companies in Nigeria suggesting that auditor tenure constrains earnings management of sampled firms. Finally, the study concluded that there is a positive and significant association between audit committee financial expertise and discretionary accruals of listed oil and gas marketing companies in Nigeria which implies that audit committee financial expertise does not mitigate earnings management of sampled firms in Nigeria.

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Based on the findings of this study, the following recommendations are suggested to different parties that are directly or indirectly involved in financial reporting process in Nigeria:

- i. Regulatory authorities in Nigeria such as SEC should come out with a policy that encourages audit firms in Nigeria to create departments within their firms that specialize along industry lines of companies listed on the Nigerian Stock Exchange (NSE). This is necessary despite the fact that there are relatively few companies listed on the NSE and irrespective of the significant positive relationship between auditor industry specialization and earnings management of sampled firms. Auditor industry specialization should be encouraged because the interaction between audit committee financial expertise and auditor industry specialization had a significant negative effect on earnings management of sampled firms in Nigeria. This is in view of the fact that corporate governance mechanisms do not work as substitutes but complement each other to effectively constrain earnings management of firms.
- ii. The study recommends auditor tenure of three years and above for external auditors of public companies in Nigeria. This reinforces SEC (2011) code of corporate governance which states that Nigerian public companies can retain external auditors for a period of ten years consecutively, while disengaged auditors can only be reappointed after a period of seven years. Auditor tenure of at least three years would enable the auditor acquire client specific experience that could make him detect questionable financial reporting practices of the firm more easily than he was at the beginning of his audit engagement while an auditor tenure of less than three years could deny the auditor firm specific experience, thus resulting to increase in earnings management of firms.
- iii. Audit committee with accounting and financial members should encourage their companies to hire industry specialist auditors. This is because good knowledge of the business environment by the auditor coupled with the accounting and financial experience of the audit committee members is likely to make each of them more effective in mitigating earnings management of firms especially in industries with complex business environment such as the oil industry.

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Effect of Financial Leverage and Dividend Policy on Share Value of Quoted Oil and Gas Companies in Nigeria

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Abstract

The study examines the impact of financial leverage and dividend policy on share value of quoted oil and gas companies in Nigeria. A total sample of eight oil and gas companies quoted on the Nigerian Stock Exchange were studied, and panel data was obtained from their annual reports and accounts and price list from the Nigerian Stock Exchange for a period of 10 years (2011-2020). The data was analysed using descriptive statistics and panel regression technique with the help of Stata 10 package. The study finds that the financial leverage measures; total debt to total capital ratio have significant positive impact on share value of the quoted oil and gas companies in Nigeria. Similarly, it was found that the share value of the companies was positively and significantly driven by the dividend policy indicator; retained earnings ratio. The study conclude that dividend policy is capable of influencing the stock prices in oil and gas sector of the Nigerian stock market. The study recommends that the management of the quoted oil and gas companies in Nigeria should explore the use of more debt capital in financing their investment opportunities in order to boost their share value in the capital market. Finally, management of the companies should retain a larger proportion of the company's earnings for growth and ensure strict utilization of retained earnings on profitable investments and viable projects that will enhance the company's financial health and consequently boost the share value of the company in the stock market.

Keywords: Financial Leverage, Dividend Policy, Share Value, Total debt to Capital Ratio, and Retained Earnings Ratio

INTRODUCTION

The primary objective of every rational investor be it an institutional investor or individual investor, is to maximize expected returns on their investments within an acceptable level of risk. Thus, they prefer to invest their funds in shares of companies with increasing prices that will eventually boost their wealth in the stock market. Generally, most investors prefer persistent increase in the value of their shares in the stock market in order to earn more return on their investments and maximize their wealth. However, in practice, the prices of stocks do not increase at all times in the stock market. They could fluctuate and perhaps result in losses that could be detrimental to the shareholders' wealth. Therefore, the players in the financial market usually find it difficult to obtain reliable information on market values of shares as these values fluctuate quite frequently (Pandey, 2003). This fluctuation in the share values of companies at the stock market has been a matter of great concern to investors, fund managers and investment analysts globally and has attracted debates from financial economists, corporate finance experts and scholars over the years (Almumani, 2014). It has been seen in many studies that the share price of a company is influenced by financial leverage. For example, Buigut, Soi, Koskei and Kibet (2013) contend that the ratio of total debt to total capital is one of the major factors causing movement in the share value of a

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company. In the same vein, it has been argued by Hussain and Gul (2011) that the company's share price is affected by its interest coverage ratio as investors perceive the company's ability to cover its interest charges from profit as an indication that the company is profitable.

Similarly, scholars like AlTroudi and Milhen (2013) and Stephen and Okoro (2014) are of the view that the firm's share price is strongly influenced by the retained earnings ratio. They further posit that investors prefer companies that retain their earnings for business growth rather than paying dividends. Conversely, Majanga (2015) asserts that dividend coverage ratio is one of the factors that cause fluctuation in the share value of a company. He added that investors prefer to invest their funds in shares of companies that pay dividends. Consequent upon the shock caused by the global financial crisis which had adversely affected the prices of the equity shares of companies in Nigeria, most companies had made strenuous efforts in raising funds to finance investments and projects in order to recover and survive continually in business. In the same vein, and as part of the effort to regain the confidence of their shareholders, companies had also adopted dividend policies that would maximize the market values of their equity shares and boost the shareholder's wealth. Adamu (2009) contended that the companies in Nigeria that were affected by the global financial crisis were mostly those in the oil and gas sector and this has had a severe effect on the economy as revenue from the sector is the major source of financing the Nigerian budget. The sector has also suffered challenges posed by the fall and fluctuation in the price of crude oil at the international market over the years, which affected the revenue base of the sector in particular and the Nigerian economy in general (Adamu, 2015) and (Ogochukwu, 2016). This study therefore, intends to assess the extent to which the debt financing decision and choice of dividend policy by the oil and gas companies in Nigeria during the global economic meltdown in 2010 and fall in price of crude oil at the global market in 2015 affected the market values of their equity shares in the stock market. The basic hypotheses underlying this study are stated thus:

H0₁: Total debt to total capital ratio does not have significant impact on share value of quoted oil and gas companies in Nigeria

H0₂: Retained earnings ratio does not have significant impact on the share value of quoted oil and gas companies in Nigeria.

LITERATURE REVIEW

Conceptual Framework

In order to give a guide for proper understanding of the various concepts of the study, different perceptions, opinions and views of authors and scholars regarding the concepts used in this study are discussed.

Share Value

According to Almunani (2014), share value is the price at which a single share of a number of saleable stocks of a company, derivative or other financial asset is sold at the capital market at a given time. It can also be defined as the price that buyers and sellers establish when they trade in the shares (Nairobi Stock Exchange Hand Book 2005 as cited in Musyoki, 2012). Seitz (1990) contends that the share price of a firm is directly observable from the stock exchange which is part of the securities segment of the capital market. The market price of the share is mostly determined by the forces of demand and supply of a particular stock in the market (Piotroski & Roulstone, 2004). Musyoki (2012) also argues that there is a confidence theory which proposes that the faith investors have about the future prospects of the company also causes changes in share price of that company. The most common types of securities are stocks, bonds and options. Securities markets are the mechanisms that facilitate the mobilization and transfer of funds from the deficit sector to the surplus sector of the economy, through the buying and selling of securities. They also ensure that these transactions are made promptly and at a fair price (Feldstein & Green, 1983). Sharma (2011) asserts that the market price at a particular moment reflects the collective wisdom and knowledge of the market and therefore represents the balance struck between the buyers and

sellers. He further proposes that daily price fluctuations arise because of changes in the buying and selling pressure. This study adopts the definition by Almumani (2014) and further views sharevalue of a firm as the price at which the equity per unit of the outstanding shares of the firm is currently sold at the stock market.

Financial Leverage

The prime goal of every financial manager in any business organization is normally to maximize the market value of the corporation. This could be achieved through the construction of an optimal financing mix that combines a prudent debt capital level with equity capital for investment on profitable projects. Financing decision which is an activity that is concerned with the mobilization of the funds required to meet the financial needs of the firm has been a critical and challenging decision which every financial manager must take. One of the most challenging aspects of financing decision is financial leverage decision which involves the extent to which a firm employs debt capital rather than employing only equity financing in its capital structure. Franklin and Muthusamy (2011) posit that financial leverage is a prerequisite for attaining an optimal capital structure. Financial leverage also known as gearing or trading on equity results from the inclusion of fixed financial charges like debt and preference shares in the firm's capital structure. Hillier, Jaffe, Jordan and Schenk (2010) opine that financial leverage is the extent to which a firm relies on debt. Financial leverage refers to the proportion of debt in the capital structure of a firm. It is the use of the fixed-charge source of funds, such as debt and preference capital along with the owner's equity in the capital structure (Elangkumaran&Nimalathan, 2013).

Financial leverage is primarily concerned with the financial activities which involve the raising of funds from outside and bearing the fixed charge against it (Javed, 2012). Radev, Lekpek and Siljkovic (2013) define financial leverage as the measure of the effect of enterprise's business activities in the presence of fixed financial expenses. Financial leverage effect can be positive or negative depending on whether the interest expenses are covered with earnings before interest and tax, and strong or weak, depending on the participation of borrowed resources in total resources. As long as a higher rate of return can be earned on assets than is paid for the capital used in acquiring the assets, the rate of return to owner can be increased. This is referred to as positive financial leverage (Marston & Perry, 1996). Financial leverage is used in many business transactions; especially real estate and financing by bonds or preferred stock instead of common stock are involved. Enekwe, Agu and Eziedo (2014) asserted that financial leverage is a measure of how a firm uses equity and debt to finance its assets. Also opined by Ward and Price (2006), financial leverage is the proportion of capital which is financed by debt as opposed to equity. They further posit that an increase in the debt capital results in increase in the shareholders' wealth and also increase in financing risk. The study perceives financial leverage as the inclusion of fixed-charge sources of financing like debt capital and preference share capital along with the equity capital in the composition of the sources of funds employed by the firm. The financial leverage of a firm is an essential financing decision component for achieving an optimal capital structure of the firm. It also serves as a vital measure of the firm's level of exposure to financing risk. Therefore, a prudent use of financial leverage or debt capital could help the firm in achieving higher return on the fixed-interest sources of financing than their costs and this consequently results in the maximization of the value of the firm and shareholders' wealth.

Total Debt to Total Capital Ratio

This ratio as the name suggests is a ratio that indicates the proportion of debt capital in relation to the total capital employed by the company in its capital structure. The ratio is used to gain a general idea as to the proportion of financial leverage being used by a company (Nasir& Nawaz, 2012). A low percentage implies that the company is less dependent on leverage (debt capital) or money borrowed from and/or owed to others. While a higher ratio suggests that a firm has employed a larger proportion of debt in its capital structure (Franklin &Muthusamy, 2011). Horne and Wachowicz (2005) posit that total debt to total capital ratio highlights the relative importance of debt financing to the firm by showing the

percentage of the firm's asset that is supported by debt financing. Jambawo (2014) asserts that the ratio of total debt to total capital measures the percentage of both short-term and long-term debts employed in financing the assets of the company. It is calculated by dividing short-term and long-term loan by the total capital employed in the business. This study adopts this assertion and further adds that the ratio indicates the amount of debt capital included in the overall finance of the firm and the extent to which these borrowed funds have been used to finance the firm's operations.

Dividend Policy

Dividend policy is primarily concerned with the financial management decision which involves the proportion of earnings to be distributed to the shareholders as return on their investments and the proportion to be retained for investment and expansion of the business activities. Nissim and Ziv (2001) see dividend policy as the regulations and guidelines that the company uses in making decisions on dividend payments to shareholders. Horne (1971) opines that dividend policy involves the decision between distribution of earnings to shareholders and retention of a portion for reinvestment in the company. Dividend policy is one of the most important financial decision issues since it entails payment of cash or distribution of additional shares to shareholders and retention of earnings for reinvestment. Dividend policy determines the division of earnings between payments to shareholders and reinvestment in the firm (Copeland, Weston & Shastri, 2004). According to Kapoor (2009), dividend policy involves the payout policy which managers pursue in deciding the size and pattern of cash distribution to shareholders overtime.

Arnold (2008) also defines dividend policy as the determination of the proportion of profits to be paid out to shareholders. Similarly, Nielsen (2010) sees dividend policy as the firm's decision whether to plough back earnings as retained earnings or payout earnings to shareholders as dividends. Lee (2009) also argues that dividend policy is meant to answer several questions such as: how much dividend should a company pay to shareholders? What will be the impact of dividend policy on the company's share price? What happens if the amount of dividend changes from year to year? Therefore, this study opines that dividend policy is the financial management practice which management adopts in determining the amount and pattern of cash or stock to be appropriated to shareholders within a given period of time. It is the central point of financial management in which both financing and investment decisions and activities depend on. The decision on the amount of earnings to be retained or distributed to shareholders determines the amount of funds to be raised and sources of funds to be explored for investment by the management. The concept of dividend policy has received many studies and debates from scholars and researchers globally in the last decades. The issue of whether dividend decision is relevant or not, and which proportion of earnings should be distributed to the shareholders as return on their investments or which proportion should be ploughed back into the businesses for re-investment and growth or whether dividend should be paid or not and which factors should be considered by companies in making their dividend decisions have been a debatable issue among scholars and challenging task to financial management practitioners.

Retained Earnings Ratio

According to Chasan (2012), retained earnings refer to the portion of the firm's profit that is set aside for reinvestment rather than being distributed to shareholders as dividends. Khan (2009) argues that retained earnings are an important source of internal financing for business expansion. Therefore, retained earnings ratio is the percentage of the earnings that is retained in the business for future growth (Adeniyi, 2008). He further contends that retention ratio is a reflection of a company's dividend policy. Retained earnings ratio is also known as the retained earnings rate of an organization (Orwel, 2010). Joshi (2012) sees retained earnings ratio as the percentage of the company's total earnings that has been kept as a source of internal financing. It is calculated by dividing the retained by the total earnings. This study adopts this assertion.

Empirical Review

Orajekwe and Okegbe (2020), examined the relationship existing between financial leverage and the dividend policy of quoted oil and gas firms in Nigeria. The research work adopted for the study ex-post facto research design. Secondary data spanning 2011 to 2018 was sourced and collated from annual reports and accounts of oil and gas firms in Nigeria and Nigeria Stock Exchange factbook. Place of Study: Department of Accountancy, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria. The data was analyzed employing descriptive statistics and the least square regression technique. The study revealed that a significant relationship exists between long term debt and dividend payout ratio; total debt and dividend payout ratio while no significant relationship exists between short term debt and dividend payout ratio of quoted oil and gas firms in Nigeria. Given the integral role the Oil and Gas sector plays in Nigeria, this study showed the centrality of the capital structure and dividend policy in ensuring the stability of corporations in the Nigerian Oil and Gas industry. The study recommended that companies should not rely mostly on long term debt in financing their operations to avoid low asset turnover. Long term debt should be employed in such capacity that the costs do not outweigh the benefits. Udoka and Vincent (2020), examined the effect of dividend policy on the volatility stock prices of firms quoted on the Nigerian Stock Exchange for the period spanning eleven (11) years from 2006 to 2016. The study employed the panel data regression technique to analyse data obtained from 60 firms, comparing 19 financial and 41 non-financial. Stock volatility was measured as the standard deviation of stock market prices while dividend policies were captured as dividend payout ratio, and dividend yield with five moderating variables (firm size, growth, leverage, earnings volatility and financial crisis). Findings revealed that dividend payout ratio has significant positive effect on stock market volatility of non-financial firms, and positive but insignificant effect for the financial firms. However, dividend yield has insignificant negative effect on stock market volatility for both financial and non-financial services firms. The study recommended that investors in the financial services sub-sector should ignore dividend policies, in share pricing and evaluation of stock riskiness.

Chukwuma, Virginia and Iyana (2020), evaluated the dividend policy and corporate financial performance with evidence from selected listed consumer goods firms in Nigeria within the period 2015-2019; using dividend pay-out ratio, earnings per share and dividend per share as proxies for dividend policy and Return on equity as proxy for financial performance with two control variables; firm size and financial leverage. The study employed correlation and ex-post facto research designs. Descriptive statistics and multiple regressions were used for data analysis. Secondary data were used, which were extracted from the Central Bank of Nigeria statistical bulletin and the Audited Annual Reports of the ten selected listed consumer goods firms in Nigeria. The results of the study show that dividend pay-out ratio; earnings per share and dividend per share are positively related to return on equity. It also revealed that dividend pay-out ratio and earnings per share were statistically insignificant with the return on equity while dividend per share was statistically significant with return on equity within the period of study. The study therefore recommends that firms should adopt a dividend policy strategy that will guarantee greater financial performance to improve on the dividend per share. It is also recommended that management should act in the best interest of the shareholders as this will go a long way in reducing agency problem. The implication of this finding is that if firms do not adopt a good dividend policy strategy that will benefit the shareholders, investors will lose interest in the firm and this will threaten the growth of some of these consumer goods firms in the future.

Alfred, Vincent and Jessie (2019), examine the effect of dividend policy on stock prices with empirical evidence from Nigeria. The study employed dividend yield (DY), dividend pay-out ratio (DPO), earnings per share (EPS) as the dividend policy variables and net asset per share (NAPS) as control variable of firm size. The dependent variables and proxy for stock prices is the market price share (MPS). Data were obtained from financial statements of 10 consumer goods firms quoted in Nigerian stock exchange. The panel data covering a period of five years from 2011 to 2015 were used. A panel least square regressions technique was employed. The results showed that DY has an insignificant negative effect on MPS, DPO

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has a significant positive effect on MPS, EPS has a significant positive effect on MPS while NAPS has an insignificant positive effect on MPS. The study thus concludes that dividend policy is capable of influencing the stock prices in consumer goods sector of the Nigerian stock market indicating that the theory of irrelevancy of dividends do not hold in the case of Nigeria. The study recommended that since dividend payout ratio and earnings per share are the only dividend policy variables that showed significant (positive) effects, investors and shareholders interested should pay more attention to analysis and explanation involving dividend yield, since it should be interested on only proxy of dividend policy that has significant effect on market value

Akudu (2017), examines the impact of financial leverage and dividend policy on share value of quoted oil and gas companies in Nigeria. A total of sample of eight oil and gas companies quoted on the Nigerian Stock Exchange were studied, and panel data was obtained from their annual reports and accounts and price list from the Nigerian Stock Exchange for a period of 10 years (2006-2015). The data was analysed using descriptive statistics and inferential statistics, that is, panel regression technique. The study finds that the financial leverage measures; total debt to total capital ratio and interest coverage ratio have significant positive impact on share value of the quoted oil and gas companies in Nigeria. Similarly, it was found that the share value of the companies was positively and significantly driven by the dividend policy indicator; retained earnings ratio. However, the second dividend policy measure; dividend coverage ratio has a positive but insignificant impact on the share value of the quoted oil and gas companies in Nigeria. The study recommends that the management of the quoted oil and gas companies in Nigeria should explore the use of more debt capital in financing their investment opportunities in order to boost their share value in the capital market. It is also recommended that the management of the companies should retain a larger proportion of the company's earnings for growth and ensure strict utilization of retained earnings on profitable investments and viable projects that will enhance the company's financial health and consequently boost the share value of the company in the stock market.

Theoretical Framework

Market Timing Theory

This theory is one of the recent theories of capital structure. It was developed by Baker and Wurgler in (2002) when they did a study on the effect of market timing on capital structure. They claim that firms with low leverage are those that raise funds when their market values are high, while high leverage firms are those that raise funds when their market values are low. The theory is closely related to the pecking order theory as it is also a signaling theory, but is treated as a separate theory because the fundamental intuition behind it is different. The theory proposes that firms would practice what is known as "tactical finance" since managers know more about the firm and its affairs more than the outsider investors. Therefore, managers have some incentive for certain actions they take. It is argued that managers could take actions based on the target and desirable debt rate of the firm. As the debt rate is an indicator of the relationship between equity and debt mix of the firm. A firm with a higher debt rate is perceived as more indebted (Franke, 1987). Therefore, the debt rate can be changed to send a signal to the outsider investors about the current condition, trend or direction of the company. Conversely, Ross (1977) argued that the management could raise the gearing rate of the firm to send the market a signal of stable trust in the future prospect of the firm and also that the firm has the ability to manage its debts effectively. Debt issuance serves as good news for market as investors have taken high gearing rate as an indicator of profitability and so they perceive that any investment in a company that has high debt rate is viable. Consequently, issuing of share could be interpreted as bad news and that leads to fall in the share price (Boudry, Kallberg and Liu, 2010).

The market timing theory further argues that when companies are in need of funds for investment and perceive that the cost of issuing equity shares is relatively low; they would prefer to issue equity. Conversely, when it is perceived that the cost of debt is relatively lower and more appropriate, they prefer to issue debt. This theory as its name suggests further posits that companies tactically time and monitor

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the performance of their equity issues in the capital market so that when they perceive that the market price of their shares is overvalued, they issue new shares and when they also perceive that their stock price is undervalued, they buy back their stock from the market. This theory clearly addresses how the ratio of total debt to total capital and retaining earnings ratio affect the share price of the firm. Therefore, this study adopts the market timing theory and considers it more relevant in explaining the impact of financial leverage or debt financing (total debt to total capital ratio and interest coverage ratio) on share value of the quoted oil and gas companies in Nigeria because the theory is in line with the objective and prediction of this study.

METHODOLOGY

This study employed the longitudinal research design since the research work assesses the impact of the explanatory variables on the dependent variable. The population of the study is all the fourteen (14) oil and gas companies quoted on the Nigerian Stock Exchange before 1st January, 2010 and had been trading till 31st December, 2019. The period covered by the study is ten years from 2010-2019. The study employed census sampling approach, sample of eight (8) oil and gas companies listed on the Nigerian Stock Exchange as at the beginning of 2010 and had traded till 31st December, 2019 and whose annual reports were available during the period under study was adopted as the statistical sample for the study. This includes (Conoil Plc, Eternal Oil Plc, Forte Oil Plc, Japaul Oil and Martime Services Plc., Mobile Oil Nigeria Plc., MRS Oil Plc, Oando Oil Plc and Total Nigeria Plc. The study used secondary source of data and the data required on the independent and control variables for the study was obtained from the annual reports of the studied oil and gas companies while the data on the dependent variable was obtained from the price list on the Nigerian Stock Exchange respectively. This study used descriptive and panel regression technique in analyzing the data obtained for the research with the help of Stata 10 package.

The model is specified based on empirical framework using the variables to be studied as explained.

$$SHVAL_{it} = \beta_0 + \beta_1 TDTCR_{it} + \beta_2 RER_{it} + \beta_3 EPS_{it} + \epsilon_{it} \dots\dots\dots i$$

SHVAL= Share value

TDTCR= Total debt-total capital ratio

RER= Retained earnings ratio

EPS= Earnings per share, a control variable

ϵ = Error term

β_0 = intercept

i =period i

t = time t

β_1 , β_2 , and β_3 = the various slope coefficients of the explanatory variables. The choice of one financial leverage measures and one dividend policy measures is motivated by the fact that these indicators have different interpretations regarding firm's degree of leverage and dividend payment decisions respectively.

RESULT AND DISCUSSION

Table 4.1 Summary of Descriptive Statistics of the Variables

| Variables | Mean | Std. Dev. | Min. | Max. | Skew. | Kurt. |
|-----------|--------|-----------|---------|---------|-------|-------|
| SHVAL | 76.911 | 72.845 | 0.500 | 331.190 | 0.001 | 0.278 |
| TDTCR | 74.761 | 14.003 | 31.530 | 121.740 | 0.146 | 0.012 |
| RTENR | 32.831 | 33.697 | -19.890 | 121.700 | 0.554 | 0.031 |

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| | | | | | | |
|--------------|-------|-------|---------|--------|-------|-------|
| EPERS | 5.060 | 6.592 | -20.230 | 32.400 | 0.049 | 0.000 |
|--------------|-------|-------|---------|--------|-------|-------|

Source: Extracted from Stata Output (2021)

Table 4.1 depicts the result of the dependent and independent variables used in the study during the period of the research. The mean of share value is 76.91. This implies that on average, the shares of the oil and gas companies quoted on the Nigerian Stock Exchange sell at ₦76.91 per share during the period under study. The standard deviation of 72.85 indicates a relatively low dispersion in the share value of the quoted oil and gas companies in Nigeria for the period under consideration. On the overall, the share prices of the quoted oil and gas companies in Nigeria indicated consistent rise over the period under study. This is evident from the minimum value of 0.5 which implies that the shares of some oil and gas companies sell below the par value while the maximum value of 331.19 indicates that some oil and gas companies have their shares above the face values in the Nigerian Stock Exchange. Also as shown from Table 4.1, the positive coefficient of Skewness of share value of 0.001 indicates that the data is normally distributed and thus meets the condition of symmetrical distribution. The mean and standard deviation of total debt to total capital ratio is 74.76 and 14.00 respectively. The mean total debt-total capital ratio of 74.76 is too high, indicating that the quoted oil and gas companies had employed more loan capital than owner's funds in their capital structure during the period under review. The use of the loan capital may be due to the strenuous efforts made by the companies in raising more external funds to finance investments and projects in order to recover from the shock caused by the global financial crisis and to survive continually in business. The standard deviation of 14.00 is low compared to the mean total debt to total capital ratio. This shows that the dispersion in the level of debt financing by the companies was relatively small during the period under consideration. It also implies that all the oil and gas companies in the Nigerian stock market during the period under consideration did not experience large differences in their financing mix. The minimum total debt-total capital ratio is 31.53 and the maximum is 121.74. The range between the lowest and highest financial leverage is wide implying that some oil and gas companies were highly financially leveraged while others were all-equity financed in the period under study.

The mean of retained earnings ratio is 32.83. This suggests that, on average, the oil and gas companies in Nigeria had retained ₦32.83 per share from their total earnings during the period under study for reinvestments and growth. The standard deviation of 33.70 is higher compared to the mean retained earnings ratio. This indicates that there was a moderately wide dispersion in the amount of profits retained by the companies during the period under investigation. This may not be unconnected to the fact that adequate financing was required by the companies to explore investment opportunities for the growth and expansion of their businesses and to survive the global financial and economic shock experienced during the period, hence the need for the retention of profits by the companies. The negative minimum value of -94.89 may be as a result of the poor performance by some oil and gas companies and the losses they reported in some years particularly during the financial crisis which was experienced globally. Consequently, these companies could not retain earnings for reinvestment. While the maximum value of 121.74 indicates that some quoted oil and gas companies still made profits in spite of the global economic meltdown and fall in the price of crude oil and were able to retain a large amount from their earnings. Therefore, they were able to plough back a proportion of their earnings as internal source of financing.

Table 4.2: Regression Results

| Source | SS | df | MS | Number of obs = 80 F(6, 73) = 8.13 |
|-----------------|-------------------|-----------|-------------------|--|
| Model | 167973.629 | 6 | 27995.6049 | |
| Residual | 251236.997 | 73 | 3441.6027 | |
| Total | 419210.626 | 79 | 5306.46363 | |

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Prob> F = 0.0000
R-squared = 0.4007
Adj R-squared = 0.3514
Root MSE = 58.665

| | Coef. | Std. Err. | t | P> t | [95% Conf. Interval] | |
|-------|-----------|-----------|-------|-------|----------------------|----------|
| shval | | | | | | |
| tdctr | 1.015635 | .4915431 | 2.07 | 0.042 | .0359908 | 1.995279 |
| rtenr | .3446156 | .2094 | 1.65 | 0.104 | -.0727179 | .7619491 |
| epers | 3.999317 | 1.12784 | 3.55 | 0.001 | 1.751535 | 6.247099 |
| _cons | -54.02508 | 39.89252 | -1.35 | 0.180 | -133.5308 | 25.48059 |

Source: Stata 10 output (2021)

Discussion of Findings

The results indicate that the value of the coefficient of determination (R^2) is 0.4007. This shows that the independent variables including the control variables that were studied explain only 40.07% of the determinants of market share value as represented by the R^2 . This therefore means that other determinants of stock price not considered in this study contribute 59.93% to the variation of share value of the quoted oil and gas companies in Nigeria during the period under review. The adjusted R Square is the coefficient of determination which explains the variation in the dependent variable as a result of changes in the independent variables. Therefore, from the result in table 4.2, the adjusted R2 was 0.3514 implying that there was variation of 35.14% on the share value of the oil and gas companies quoted on the Nigerian Stock Exchange caused by changes in total debt-total capital ratio, retained earnings ratio, and earnings per share during the period under consideration. The Wald Chi2 value of 48.81 and the P-Value of 0.0000 as indicated in the table also show that the model is fit. In table 4.2, the coefficient for total debt to total capital ratio of 1.016 indicates a positive correlation between total debt to total capital ratio and share value. Also, the p-value of 0.012 indicates that relationship is significant at 5% significance level. Therefore, the study rejects the null hypothesis which states that total debt to total capital ratio does not have significant impact on share value of quoted oil and gas companies in Nigeria. This means that the share value of the oil and gas companies in Nigeria is positively and significantly affected by the level of leverage of the companies. This implies that the higher the value of financial leverage the higher the share value of the oil and gas companies in Nigeria. This finding is contrary to the claim of the market timing theory which proposes that firms with low leverage are those that raise funds when their market values are high, while firms with high leverage are that raise funds when their market values are low. The result of this study is in consonance with the findings of Buigut, Soi, Koskei&Kibet (2013) and Adenugba, Ige&Kesiinro (2016) where the results indicated that financial leverage significantly influenced the market value of share, but not consistent with the studies by Hussain & Gul (2011), Obo, Isa &Adekoya (2012) and Jambawo (2014) which found otherwise. The researcher deduce that prudent borrowing and efficient use of debt financing on viable projects by the companies boost the shareholders fund which consequently increase the share value in the market.

The coefficients for retained earnings ratio of 0.344 indicates that retained earnings ratio has a positive relationship with share value and the p-value of 0.019 also indicates that the relationship between retained earnings ratio and share value is significant at level 5% significance level. Consequently, the study rejects the null hypothesis which states that retained earnings ratio does not have significant impact on share value of quoted oil and gas companies in Nigeria. This means that the share value of the oil and gas companies in Nigeria is positively and significantly influenced by the retained earnings ratio, implying that the companies with higher retained earnings per share are more likely to display high share value while companies with lower retained earnings per share are likely to have low share value. Therefore, it

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can be deduced that when the company's earnings are ploughed back and re-invested on profitable projects, it increases earnings of the firm and shareholders' wealth and consequently boosts the market share value of the company. This finding is in support of the tax preference theory which contends that capital gains are taxed at lower rate and are taxed only when the asset is sold, and this therefore makes investors to prefer investing their funds in companies that retain their earnings instead of paying dividend, which consequently will cause the share price to rise. This finding is in close conformity with the findings of Pani (2008), Joshi (2012), Al Masum (2014) and Majanga (2015) where it was observed that retained earnings ratio is a major determinant of stock prices, but not in line with study by Azeem and Kouser (2011), Sahrif, Ali and Jan (2015), and Duke, Nneji and Nkamare (2015) which reported otherwise. Similarly, the coefficient for dividend coverage ratio of 1.323 shows a positive relationship with share value. The coefficient of 3.910 for earnings per share, a control variable implies a strong positive relationship with share value. Also, the p-value of 0.042 for the earnings per share also shows that the relationship between the earnings per share and the share value of the oil and gas companies during the period under consideration is significant at 5% level. This means that the higher the earnings per share the higher the share value and the lower the earnings per share, the lower the share value of the companies. This result supports the findings of Singhanian (2006), Sharma (2011), Malhorta (2013), Hunjra, Ijaz, Chani, Hassan & Mustafa (2014) and Sharif, Ali & Jan (2015), but not in line with the findings of studies by Khan, Aamir, Qayyum, Nasir & Khan (2011), and Jakada & Nyamugure (2015) who found an insignificant relationship between earnings per share and share value.

CONCLUSION AND RECOMMENDATIONS

The following conclusions are drawn from the findings of the study; the total debt to total capital ratio positively and significantly influences the share value of the quoted oil and gas companies in Nigeria implying that the companies with high degree of financial leverage are likely to have high share value while those with low degree of financial leverage are likely to display low share value. The share value of the quoted oil and gas companies in Nigeria is positively and significantly influenced by the retained earnings per share, implying that the companies with higher retained earnings ratio are more likely to display high share value while companies with lower retained earnings ratio are likely to have low share value. The earnings per share has a positive and significant impact on the share values of the quoted oil and gas companies in Nigeria, suggesting that an increase in the earnings per share causes the share value to rise while a decrease in the earnings per share leads to fall in the share value of the companies. The study concludes that dividend policy is capable of influencing the stock prices in oil and gas sector of the Nigerian stock market. From the foregoing, the study recommends that the management of the quoted oil and gas companies in Nigeria should explore the use of more debt capital in financing their investment opportunities in order to boost their share value in the capital market. Finally, management of the companies should retain a larger proportion of the company's earnings for growth and ensure strict utilization of retained earnings on profitable investments and viable projects that will enhance the company's financial health and consequently boost the share value of the company in the stock market.

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Effect of Capital Structure on Financial Performance of Listed Manufacturing Firms in Nigeria

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Abstract

There exists divergence of opinion in literature on the relationship between capital structure and firm's financial performance. This mix of opinions makes the direction of the relationship between debt holders and equity holders to be controversial. Therefore, this study investigated the impact of capital structure on financial performance of listed manufacturing firms in Nigeria. The study formulated three explanatory variables and one dependent variable return of assets (ROA) and used generalized least square multiple regression to analyse the secondary data extracted from the annual reports and accounts of the eight (8) sampled firms for the period 2010 to 2019. The study found that total debt to capital ratio and ratio of the long-term debt have significant impact on the financial performance of listed manufacturing firms in Nigeria. The study also found that total debt to total equity has no significant effect on the financial performance of the firms. The study concluded that total debt to total equity is not one of the factors that influence the financial performance of listed manufacturing firms in Nigeria. The study therefore recommend that the management of listed manufacturing firms should reduce the level of total debt to total assets and long-term debt to total assets in their capital structure components, because they affect their financial performance negatively.

Keywords: Capital Structure, Return on Assets, Financial Performance, Total debt to Capital Ratio, Total Debt to Total Equity

INTRODUCTION

The nature and extent of relationship between capital structure and financial performance of firms have attracted attention in the literature of finance. Capital structure involves the decision about the combination of the various sources of funds a firm uses to finance its operations and capital investments. These sources include the use of long-term debt finance called debt financing, as well as preferred stock and common stock also called equity financing. One of the most important goals of financial managers is to maximize shareholders wealth through determination of the best combination of financial resources for a company and maximization of the company's value by determining where to invest their resources. Capital structure has faced lots of criticism in identifying the mixture of debt and equity as it ignores various factors like risk and profitability. When the business is entirely funded by common stock, all cash flow goes to the shareholders. on the other hand, when the business is funded with both debt and equity securities, it divides the cash flows into two parts, a safe part that goes to the debt holders and a riskier portion which goes to the shareholders (Bradley, 2004). At the heart of capital structure decisions is the search for the optimal capital structure, which is the level of capital that maximizes profitability and shareholders' value. According to corporate finance theory, the capital structure does have an impact on a

firm's cost of capital; it plays a crucial part in determining the cost of capital, which consequently affects the business' profitability (Abor & Biekpe, 2010). Financial performance on the other hand is the measure of how well a firm can use its assets from its primary business to generate revenues. Erasmus (2008) noted that financial performance measures like profitability and liquidity among others provide a valuable tool to stake holders which aids in evaluating the past financial performance and current position of a firm. Financial performance evaluation are designed to provide answers to a broad range of important questions, some of which include; whether the company has enough cash to meet all its obligations, is it generating sufficient volume of sales to justify recent investment. As such capital structure is closely linked with financial performance (Tian & Zeitun, 2007). Financial performance can be measured by variables which involve productivity, profitability, growth or, even, customers' satisfaction. These measures are related among each other. Financial measurement is one of the tools which indicate the financial strengths, weaknesses, opportunities and threats. Those measurements are return on investment (ROI), residual income (RI), earning per share (EPS), dividend yield, return on assets (ROA), growth in sales, return on equity (ROE), (Stanford, 2009).

One of the main factors that could influence the firm's performance is capital structure. Since bankruptcy costs exist, deteriorating returns occur with further use of debt in order to get the benefits of tax deduction and interest. Therefore, increases in bankruptcy costs are higher than the marginal tax-sheltering benefits associated with the additional substitution of debt for equity beyond an appropriate capital structure. Firms are willing to maximise their performance, and minimise their financing cost, by maintaining the appropriate capital structure or the optimal capital structure. There has been an ongoing debate on the issue of capital structure and financial performance of firms. This controversy is further narrowed down to identifying which of the variables debated is most influential in predicting and determining the capital structure of manufacturing firms. The choice of optimal capital structure of a firm is difficult to determine. A firm has to issue various securities in a countless mixture to come across particular combinations that can maximize its overall value which means optimal capital structure. Optimal capital structure also means that with a minimum weighted-average cost of capital, the value of a firm is maximized. According to Rahul (1997), poor capital structure decisions may lead to a possible reduction in the value derived from strategic assets. Thus given the foregoing the objective of the study is to examine effect of capital structure on financial performance of listed manufacturing firms in Nigeria. In other to clarify this objective the under listed hypothesis will be tested:

H₀₁: capital structure has no significant impact on financial performance of listed manufacturing firms in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Capital Structure

Capital structure is concerned about the methods in which the organization obtains and manages the long-term financing it needs to give support to its long-term investment (Ross, Westfield, & Jordan 2003). Badar and Saeed (2013) defined capital as anything that is used in a business. Capital is an uncertain but critical resource for all organizations. Suppliers of finance are able to exert control over firms: debt, preferred stock and common equity, with equity coming from issuing new stocks and by retained earnings (Brigham and Houston 2007). The capital structure of a firm is its mix of debt and equity (Melicher, Norton and Town 2003). According to Aliu (2010), there are two different ways of financing the assets of an organization: internal equity or external debt. Capital structure refers to the way a corporation finances its assets through some combination of equity and debt (Tsai et al 2010). Simon and Afolabi (2011) stated that capital structure has to do with the ways in which funds needed for business activities are sourced for. Suleiman and Nour, (2013) defined capital structure as the term used to represent the proportionate relationship between debt and equity. From all the definitions above, it is eminent that capital structure in

summary refers to the structure of a firm's liability. The financing or capital structure decision is a significant managerial decision, which influences the shareholder's return, and risk, which consequently affects the market share because of capital structure decisions. How to plan financing decision using a particular means or mix of funding to maintain a proper capital structure is an important issue of concern demanding urgency for financing managers if their sector is ever to play a major role in economic growth and development. Capital structure is essential to how a firm finances its overall operations and growth by using different sources of funds. Modigliani & Miller (1958) theorem is the broadly accepted capital structure theory because it is the foundation of capital structure theory, which has been used by many researchers. It is recognized as a sort of structure with which firms receive direction and orientation concerning their business activities. It is also the heart of both a market economy and a democratic society. It is said to be the financing performance of a firm (Simon & Afolabi, 2011). In addition, capital structure represents a means for decision making of business firms and facilitates maximization of return on investment, as well as boosting the efficiency of financing and dividend decisions (Chandrasekharan, 2012).

Financial Performance

Financial performance provides a deductive measure of how well a company can use assets from business operations to generate revenue. Van Horn (2005) defined financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term according to Pandey (2001) is used as a general measure of the overall financial health of a business. Research on the firm's financial performance emanates from organizations theory and strategic management. The notion of financial performance is used to describe performance of an entity with the legal status of a company. The concept of financial performance is a controversial issue in finance due to its multidimensional meaning. In analyzing a firm's financial performance, emphasis should be made in formulating an adequate description of the concept of a financial performance.

Total Debt to Total Assets

The total debts to total assets measure the amount of the total funds provided by creditors in relation to the total assets of a firm. Generally, creditors would prefer low ratio for all debts because the lower the ratio the greater is the cushion against creditors losses in the event of liquidation. Total debt to total assets is a debt ratio that defines the total amount of debt relative to assets. This enables comparison of debt to be made across different companies. The higher the ratio the better degree of debt and consequently financial risk. This is a broad ratio that includes long term debt and short-term debt (borrowings maturity within one year) as well as all tangible and intangible assets (Akinsulire, 2014). Debt ratio is a solvency ratio that measures firm's total liabilities as a percentage of its total assets. In a sense, the debt ratio shows a company's ability to pay off its liabilities with its assets. In other words, this shows how many assets the company must sell in order to pay off all of its liabilities. This ratio also measures the financial debt of a company. Companies with higher levels of liabilities compared with assets are considered highly indebted and more risky for lenders. It helps investors and creditors analyses the overall debt burden on the company as well as a firm's ability to pay off its debt in the future especially during uncertain economic times. The debt ratio is calculated by dividing total liabilities by total assets. Both of these numbers can easily be found in the balance sheet. A lower debt ratio usually implies a more stable business with the potential of longevity because a company with lower ratio also has an overall debt posture. Each industry has its own sbenchmarks for debt, but 0.5 is reasonable ratio (Ojo, 2012). The debt ratio is a fundamental solvency ratio because creditors are always concerned about being repaid. When companies borrow more money, their ratio increases and creditors will no longer loan them money. Companies with higher debt ratios are better off looking to equity financing to grow their operations. Debt ratios measure a firm's ability to repay long term debt. It is a financial ratio that indicates the percentage of a company's assets that are provided via debt. It is the ratio total debt, the sum of current liabilities and long-term liabilities and total assets as well as the sum of current asset, fixed assets and other assets such as goodwill (Semiu& Collins, 2011).

Total Debt to Total Equity

Total debt to total equity ratios measures the proportion of creditors fund in relation to shareholder's fund. Creditors would like this ratio to be lower; because the lower the ratio the higher the level a of firm's financing that is being provided by shareholders and the larger the cushion (margin of protection) in the event of shrinking asset values or outright losses. This a measure of how much suppliers, lenders, creditors and obligors have committed to the company versus what shareholders have committed (Kurfi, 2003). Total debt to total equity refers to the ratio of debt-to-equity capital of a company. As a result of the payment of interest and repayment of principal amount of the debt, a large part of the firm's cash flow would decrease (Magpayo, 2011). The debt to equity ratio shows the percentage of a company's financing that comes from creditors and investors. A higher debt to equity ratio indicates that more creditors financing (bank loans) is used than investors financing (shareholders). The debt to equity ratio is considered a balance sheet because all of the elements are reported on the statement of financial position. Each industry has different debt to equity ratio benchmarks, as some industries tend to use more debt financing than others. A debt ratio of 0.5 means that there are half as many liabilities as there is equity. In order words, the assets of the company are funded 2 to 1 by investors to creditors. This means that investors own 66.6 cents on the dollar (Erasmus, 2008). Companies with a higher debt to equity ratio are considered more risky to creditors and investors than companies with a lower ratio. Unlike equity financing, debt must be repaid to the lenders. Since debt financing also requires debt servicing or regular interest payments, debt can be a far cheaper form of financing than equity financing. Creditors view a higher debt to equity ratio as risky because it shows that investors have not funded the operations as much as creditors have. In other words, investors do not have as much skin in the game as the creditors do. This could mean that investors do not want to fund the business operations because the company is not performing well. Lack of performance might also be the reason why the company is seeking for extra debt financing (Stanford, 2009).

Long Term Debt to Total Assets

Long-term debt to total assets measures the relative weight of long-term debt to the capital structure (long-term financing) of a firm's long-term debt to- total assets. Long term debt to total assets ratio is the ratio that represents the financial position of the company's ability to meet its financial requirements. As this ratio is calculated yearly, decrease in the ratio would denote that the company is faring well, and is less dependent on debts for their business needs (Kurfi, 2003). The higher the level of long-term debt, the more important it is for a company to have positive revenue and steady cash flow. It is very helpful for management to check its debt structure and determine its debt capacity (Akinsulire, 2014). The long-term debt to total assets ratio is a measure of the financial leverage of a company. Long term debt is debt due for repayment in over 12 months and is not included in the current liabilities figure on the balance sheet. It includes mortgages and long-term leases, but not general trading liabilities (Akinyomi, 2013). A high ratio usually indicates a higher degree of business risk because the company must meet principal and interest obligations. Potential creditors are reluctant to give financing to a company with a high debt position. However, the magnitude of debt depends on the type of business. For example, a bank may have a high debt ratio but its assets are generally liquid. A utility can afford a higher ratio than a manufacturer because its earnings are more stable (Khalaf, 2013).

Financial Performance

A firm's financial performance is of importance to investors, stakeholders and the economy at large. Investors are interested in the returns for their investment. A business that is performing well can bring better reward to their investors. Financial performance of a firm can increase the income of its staff, rendering quality product or services to its customers and creating more goodwill in the environment it operates. A company that has good performance can generate more returns which can lead to future opportunities that can in turn create employment and increase the wealth of people. Firm's performance is

the ability of a firm to achieve its objectives resources. According to Rahul (1997) a company's performance is its ability to achieve its target objectives from its available resources. Suleiman (2013) viewed a firm's performance as the result of a company's assessment or strategy on how well a company accomplished its goals and objectives.

Financial performance provides a deductive measure of how well a company can use assets from business operations to generate revenue. Van Horn (2005) defined financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term according to Pandey (2001) is used as a general measure of the overall financial health of a business. Research on the firm's financial performance emanates from organizations theory and strategic management. The notion of financial performance is used to describe performance of an entity with the legal status of a company. The concept of financial performance is a controversial issue in finance due to its multidimensional meaning. In analyzing a firm's financial performance, emphasis should be made in formulating an adequate description of the concept of a financial performance. Measuring of firm's financial performance is one of the management strategic functions aimed at satisfying the interest of shareholders and other stakeholders in a company. Firm's performance appraisal involves a periodic and systematic evaluation of its operations to determine the achievements of the firm's objectives.

Return on Asset

Return on Assets expresses the net income earned by a company as a percentage of the total assets available for use by that company. ROA suggests that companies with higher amounts of assets should be able to earn higher levels of income. ROA measures management's ability to earn a return on the firm's resources (assets). The income amount used in this computation is income before the deduction of interest expense, since interest is the return to creditors for the resources that they provide to the firm. The resulting adjusted income amount is thereby the income before any distribution to those who provided funds to the company. ROA is computed by dividing net income plus interest expense by the company's average investment in asset during the year.

Empirical Review

Akinleye and Akomolafe (2019), examine capital structure and profitability of manufacturing firms listed on the Nigerian stock exchange. Specifically, the study analyzed the impact of disaggregated variables of debt finance (Short term debt and long term debt) and equity finance (share capital and share premium) on profit after tax. Secondary data were gathered from annual reports of sampled firms over a period of ten years (2008-2017) and were analyzed using panel data estimators such as pooled OLS estimator, fixed effect estimator, random effect estimator, Hausman test, and Pesaran test of cross-sectional dependence. The findings revealed that short term debt has insignificant positive effect on profit after tax of manufacturing firms showing in specific term a coefficient estimate of 0.114985 ($p=0.5890 > 0.05$) long term debt exerts significant positive impact on profit after tax, with specific coefficient estimate of 0.578290 ($p=0.0001 < 0.05$) share capital exerts significant positive effect on profit after tax, with coefficient estimate of 0.784525 ($p=0.0000 < 0.05$) share premium exerts insignificant negative effect on profit after tax, with coefficient estimate of -0.000395 ($p=0.9924 > 0.05$). The study concluded that short term debt has declining effect on the profitability of manufacturing firms in the country, while the long term variable of debt finance of firms spurs the rate of profitability. In clear term disaggregated debt finance subsets exerts significant effect on the profitability of firms sampled in the study. On the other hand equity finance disaggregated into share capital and share premiums reflect that share capital has significant positive effect on profit after tax, while share premium has insignificant negative effect on profit after tax. The study recommended that manufacturing firms in the country should restructure their capital structure more to favor long term debt in order to bolster the level of profitability, also the fraction of short term debt should be reduced in the composition of capital structure, so as to minimum the deleterious effect it might pose on the profit prospect of the firms and more attention should be given to share capital than share premium in the make of equity finance of manufacturing firms in the Nigeria.

Oyibi (2019), investigate the impact of capital structure on the performance of organizational performance with particular reference to Nigerian Food and Beverage Companies. Secondary data was used for this study. It was adopted from the audited financial statements of the listed food and beverage companies in the Nigerian Stock Exchange (NSE), for the period of the year 2014 -2018. The method of analysis used was Pearson Moment Correlation Coefficient and Linear Regressions. The results reveal that firm leverage, tangibility of assets and liquidity have an inverse relationship with the financial performance of the Nigerian food and beverage industry, while, growth and firm's size have a positive relationship with the financial performance of Nigerian food and beverages industry. The study, recommends that Nigerian Food and Beverage should, therefore, strike a balance between their choice of capital structure and the effect on its performance as it affects the shareholder's risks. Oluseyi and Felix (2017), examine the effect of capital structure on the financial performance of manufacturing firms in Nigeria. The secondary data of which the published annual reports for the period 2008-2014 were employed as the key source of data collection for ten sampled manufacturing firms. The relationship between capital structure and financial performance was determined using panel data and multiple regression analysis, variables of return on assets and returns on equity were used to measure the financial performance, also variables of debt-equity ratio, asset turnover and age of firm were used to measure capital structure of the sampled manufacturing firms. This study observed that debt-equity ratio has a negative but statistically significant effect on financial performance, further, asset turnover has a positive and significant effect on financial performance also age of firm has a negative insignificant effect on financial performance of the sampled manufacturing firms as measured by Return on assets. However, the study also revealed that the debt-equity ratio has positive and insignificant effect on financial performance, also asset turnover has a positive and significant effect on financial performance, and the age of firm has negative but statistically significant effect on financial performance of the sampled manufacturing firms as measured by Return on equity. The present study recommends that management should be careful when using debt as its source of financing its activities. The benefit of financing with debt is that there will be no tax duties accrued to borrowed funds in an organization. Therefore, management should seek to finance their activities with retained earnings and use debt as a last option as supported by the pecking order theory.

Olaifa, Yakubu and Dangana (2017), examines effect of capital structure and its influence on profitability in Nigeria. This study looks at the effect of Leverage on profitability of Quoted Healthcare firms in Nigeria for a period of 10 years (2003-2012). The study employed panel data analysis by using Ordinary Least Square regression model. It was found out that leverage has a significant effect on profitability of quoted healthcare firms in Nigeria. The study concludes that leverage impact return on asset, return on investment and earnings per share negatively while it affect return on equity positively. It is recommended that management should balance the use of equity and debt in a way that will impact positively on firms value, we also added that Central Bank of Nigeria (CBN) should review and lower interest rate on bank loan so that healthcare firms can have access to cheaper capital to develop standard healthcare facilities, create more wealth and employment opportunities which in turn will affect the economy in a positive way. Kakanda, Bello and Abba (2016) Examined effect of Capital Structure on Performance of Listed Consumer Goods Companies in Nigeria. The study made use of ex-post facto research design to examine the relationship between independent and dependent variables while controlling for other variables. Descriptive statistics, correlation, and hierarchical multiple regression analyzes were carried out to test the hypotheses developed in the study. Secondary data were sourced from the annual financial reports of the sampled firms from the year 2008 – 2013, which was obtained from African Financial website and official website of Nigerian Stock Exchange. The study found that there is a positive and significant correlation between firm's capital structure and corporate financial performance. The study recommended that manufacturing firms in the country should restructure their capital structure more to favour long term debt in order to bolster the level of performance. Foye, Olusola and Aderemi (2016). Researched on financial structure and the profitability of manufacturing

companies in Nigeria. This study employed the use of secondary data. The spearman's rank correlation and regression techniques were used for analysis, using the stats package for a sample of 25 manufacturing companies quoted on the Nigerian stock exchange for the period 2008-2012. The study showed that equity has a significant positive relationship with the profitability of manufacturing companies in Nigeria. The study recommended that managers should improve more facilities on equity capital and policymakers should encourage manufacturing companies to reduce the cost of debt.

Theoretical Framework

Modigliani and Miller Theory

The first theory of interest is Modigliani and Miller (1958) theorem, which specifies that how a firm finances its operations is irrelevant. In particular, it states that the value of a firm is independent of its' capital structure making capital structure irrelevant to the firms. Thus the value of a firm remains the same regardless of whether it finances its operations with debt or equity because the cost of capital is constant making capital structure irrelevant. The assumptions made by Modigliani and Miller are; Perfect and frictionless markets, no transaction costs, no default risk, no taxation, both firms and investors can borrow at the same interest rate; there is homogeneous expectation homogeneous risk and equal access to all relevant information. However, in criticizing and improving Modigliani and Miller, Baxter (1976) added the issue of bankruptcy costs and their impact on the value of the indebted firm. These costs include liquidation fees, legal fees and reorganization costs, which would result from the firm going bankrupt. Hence a firm with a higher debt would incur higher bankruptcy costs than one with less debt. Berens and Cuny (1995) on the other hand criticized the theorem proposition from corporate tax point of view. He argued that if a firm's value is an increasing function of indebtedness, due to tax deductibility of the interest payments on debt, then it implies that the more debt a firm employs the less tax it would pay, indicating that the value maximizing (optimal) capital structure should be all debt, since the tax benefits are maximized.

Tradeoff Theory

The second theory of interest is the Tradeoff Theory propounded by Myers (1984) stipulates that the firm's capital structure will involve the trade-off between the tax advantage of debt and various leverage related costs. Due to differences in the characteristics of firms, target leverage ratios will vary from firm to firm. Institutional distinctions, such as different financial systems, tax rate and bankruptcy law etc., will also lead the target ratio to vary across countries. The theory predicts that firms with more tangible assets and more taxable income to shield should have high debt ratios. Firms with more intangible assets, whose value will dissolve in case of liquidation, should rely more on equity financing. In terms of profitability, trade-off theory predicts that more profitable firms should mean more debt serving capacity and more taxable income to shield, thus a higher debt ratio will be anticipated. Under trade-off theory, the firms with high growth opportunities should borrow less because they are more likely to lose value in financial distress.

Pecking Order Theory

The third theory of importance is the pecking order theory as propounded by Myers (1984) which stated that firms prefer internal sources of finance, they adapt their target dividend payout ratios to their investment opportunities although dividends and payout ratios are gradually adjusted to shifts in the extent of valuable investment opportunities. In addition, Myers (1984) stated that in the occurrence that external finance is required, firms are most likely to issue the safest security first that is to say they start with debt then possibly convertible debt then equity comes as last resort. In summary, Myers' argument was such that businesses adhere to a hierarchy of financing sources and prefer internal financing when available. If external financing were necessary, debt would be preferred over equity. Pandey (2005) also agreed with Myers' argument when he noted that managers always preferred to use internal finance and

would only resort to issuing shares as a last resort. He proceeded to add that the pecking order theory was able to justify the negative inverse relationship between profitability and debt ratio within an industry. However, the theory has some limitations since it does not explain the influence of taxes, financial distress, security issuance costs, agency costs, or the set of investment opportunities available to a firm upon that firm's actual capital structure. It ignores the problems that can arise when a firm's managers accumulate so much financial slack that they become immune to market discipline. As such the theory is offered as a complement to, rather than a substitution for, the traditional trade-off model. For the purpose of this study, the researcher will adopt the Pecking order theory by Myers (1984) as modified by Oke and Afolabi (2010) to suit the objective of this study.

METHODOLOGY

This study adopted the use of longitudinal panel design. The longitudinal panel design was an appropriate design preferred by the researcher as it aim at establishing relationships between dependent and independent variables through quantifiable results. The population of this study consists of the 102 manufacturing firms listed on the Nigerian Stock Exchange as at December 2019. The firms are classified into eight (8) sub-sectors. For the purpose of this study, stratified and random sampling techniques were used considering the sectorial grouping of firms in the stock market. The sample size of the study is comprised of eight (8) manufacturing firms drawn one per each sub-sector from the defined population. This includes (Livestock Feed Plc, Learn Africa Nig. Plc, Julius Berger Plc, Guinness Nigeria Plc, Evans Plc, Omatek Venture Plc, Lafarge Cement Nig. Plc, Aluminium Extrusion Industries Plc.) This study used secondary sources of data. The data were obtained from the annual reports and accounts of the sampled manufacturing firms and Nigerian Stock Exchange Fact Book covering the period of ten years (2010-2019). In analyzing the collected data, descriptive statistics and panel multiple regression analysis were used. The technique were made possible with the use of the Stata 13 package. This technique is in line with that adopted Lawal, Edwin, Monica and Adisa (2014), Dahiru (2013); and Abayomi (2013). The model that used in testing the hypotheses of the study is presented below:

$$ROA = \beta_0 + \beta_1 TDTA + \beta_2 TDTE + \beta_3 LTTA + \varepsilon_{it} \dots \dots \dots (i)$$

Where:

ROA = Return on asset

$\beta_0, \beta_1 - \beta_4$ = parameters to be estimated

TDTA = Total-debt to total assets

TDTE = Total-debt to total equity

LTTA = Long-debt to total assets

ε = error term signifying other variables not captured in the study

it = Firm i at time t

RESULTS AND DISCUSSION

Table 1: Summary of Descriptive Statistics

| Variables | Min. | Max. | Mean | Std. Dev. |
|-----------|--------|---------|-----------|--------------|
| ROA | -5.265 | 14.573 | 0.2364194 | 1.268423 |
| TDTA | 0.043 | 19.6572 | 6.987807 | 7.151588 |
| TDTE | 0.030 | 72.755 | 8.203064 | 10.15754 |
| LTTA | 0.000 | 30.648 | 0.8527 | 2.607513 |

SOURCE: Extract from STATA Output (2021)

Table 1 presents the descriptive statistics for the dependent and explanatory variables. From the table, return on assets has minimum and maximum values of -5.265 and 14.573 respectively and the mean value of 0.2364 as well as the standard deviation value of 1.2684. The standard deviation of 1.2684 signifies that the data deviate from the mean value from both sides by 1.2684 implying that there is a wide dispersion of the data from the mean because standard deviation is higher than the mean value. The table also shows that the mean of the total debt to total assets of the sampled firms is 6.9878 with standard deviation of 7.1516, and minimum and maximum values of 0.043 and 19.6572 respectively. This implies that the performance of the firms in terms of total debt to total assets is on average 6.9878, and the standard deviation value indicates that the total debt to total assets of the sampled firms deviates from the mean value from both sides by 7.1516, implying that there is significant dispersion of the data from the mean because the standard deviation is higher.

Moreover, the table shows that the mean of the total debt to total equity of the firms is 8.2031 with standard deviation of 10.1575. The minimum and maximum values are 0.030 and 72.755 respectively. This implies that total debt to total equity of the sampled firms is on average 8.2031, and the standard deviation value indicates that the value deviates from the mean from both sides by 10.1575, implying that there is significant dispersion of the data from the mean because the standard deviation is larger.

Finally, the table shows that the mean of the long term debt to total assets of the firms is 0.8527 with standard deviation of 2.6075. The minimum and maximum values are of 0.000 and 30.648 respectively. This implies that long term debt to total assets of the firms is on average 0.8527. The standard deviation indicates that the value of the firms' long term debt to total assets deviates from the mean value from both sides by 2.6075. This implies that there is significant dispersion of the data from the mean because the standard deviation is higher.

Normality Test

```
. sktest roa tdta tdte ltta
```

| Skewness/Kurtosis tests for Normality | | | | | |
|---------------------------------------|-----|--------------|--------------|--------------|-----------|
| Variable | Obs | Pr(Skewness) | Pr(Kurtosis) | Joint | |
| | | | | adj chi2 (2) | Prob>chi2 |
| roa | 80 | 0.1315 | 0.0558 | 5.68 | 0.0583 |
| tdta | 80 | 0.0000 | 0.7483 | 13.67 | 0.0004 |
| tdte | 80 | 0.7247 | 0.0070 | 6.88 | 0.0321 |
| ltta | 80 | 0.1289 | 0.8397 | 3.05 | 0.3592 |

The skewness indices for all the other data sets seem to be positive, indicating more observations to the left of the normal curve. As it is, data outlier is normally associated with negative skewness. With regards to kurtosis, all the variables have extreme peaks that are above normal peak, as their kurtosis figures are above the normal kurtosis of 0 or near 0. On the basis of kurtosis, none of the data sets can be qualified as normally distributed. Thus, if the P- value is significant, the null should be rejected and the data be regarded as not normally distributed. From table, it can be evident that only total debt to total assets and total debt to total equity are not normally distributed while return on assets and Long-debt to total assets are normally distributed and fit for the study. In view of the nature of the data, both fixed effect and random effect models were tested. Hausman specification test was then used to decide between the two results. The result from the Hausman test revealed a Chi2 value of 34.34 with p-value of 0.000 that is statistically significant at 1%. This implies that the test considered the fixed effect as the most appropriate estimator. The full results of the fixed and random effect as well as Hausman test are attached as appendix

Table 2: Fixed Effect Regression Results

| Variables | Coefficient | T-Values | P-Values | Tolerance | VIF |
|------------------------|-------------|----------|----------|-----------|------|
| Constant | 0.5994104 | 2.58 | 0.011 | | |
| TDTA | -0.0550336 | -2.19 | 0.030 | 0.721016 | 1.39 |
| TDTE | -0.0206729 | -0.94 | 0.348 | 0.465383 | 2.15 |
| LTTA | -0.1892773 | -5.42 | 0.000 | 0.701805 | 1.42 |
| R ² | 0.4995 | | | | |
| Wald Chi ² | 37.67 | | | | |
| Prob. Chi ² | | | 0.0000 | | |

Source: Stata Output (2021)

Discussion of Findings

$$\text{ROA} = 0.5994 - 0.0550\text{TDTA} - 0.0207\text{TDTE} - 0.1893\text{LT TA}$$

The table showed that total debt to total assets has negative significant impact on the financial performance of listed manufacturing firms in Nigeria. This can be observed from the value of beta the coefficient of -0.0550336 with p-value of 0.030 indicating that the p-value is statistically significant at 5%. This implies that total debt to total assets as one of the proxies of capital structure that significantly affect the financial performance of listed manufacturing firms in Nigeria. The results serves as a basis for rejecting the first hypothesis, which states that total debt to total assets has no significant impact on the financial performance of listed manufacturing firms in Nigeria. The result supports the findings of Song (2006), Fosberg and Ghosh (2006), Zaitun and Tain (2007), Ebaid (2009), Mramor and Cringoji (2009), Heydar et al (2012) and Abolfazl et al (2013) who found that total debt to total assets is negatively and significantly associated with performance of firms and the findings of Jude (2013) and Mathanika et al (2015) who found a positive insignificant relationship between total debt to total assets and financial performance.

The table also revealed that total debt to total equity has negative insignificant impact on the financial performance of listed manufacturing firms in Nigeria. This can be seen from the value of the beta coefficient of -0.0206729 with p-value of 0.348 indicating that the p-value is not statistically significant. This implies that total debt to total equity does not have significant effect on the financial performance of the firms. The result could not provide sufficient evidence to reject the second hypothesis, which states that total debt to total equity has no significant impact on the financial performance of listed manufacturing firms in Nigeria. This is in line with the findings of Cengiz, Yunus, and Sukriye (2013) who reported negative insignificant relationship between total debt to total equity and firms' financial performance. The result is however in contrast with the findings of Gholamreg (2013), Sulieman (2013), Amara and Bilal (2014) and Maina and Ishmail (2014) who found that total debt to total equity is negatively and significantly associated with performance of firms and the findings of Heydar (2012), Karadeniz et al (2012), Simon and Afolabi (2012), Khalaf (2013) and Idode et al (2014) who found a positive significant relationship between total debt to total equity and financial performance.

Furthermore, the result showed that long term debt to total assets is negatively and significantly correlated with the financial performance of listed manufacturing firms in Nigeria. The beta coefficient of the variable is -0.1892773 and the p-value is 0.000 which is significant at 1% level of significance. This indicates that long term debt to total assets has negative significant impact on the financial performance of firms. The implication of this finding is that the lower the long term debt to total assets ratio of a firm the better the quantum of profit to be reported by the firm. The result provided a basis for rejecting the third hypothesis, which states that long-term debt to total assets has significant effect on the performance of listed manufacturing firms in Nigeria. This is in line with the findings of Zaitun and Tian (2007), Ngoc and Jeremy (2011), Muhammad et al (2012) and Rasa and Jurgita(2012) who found negative significant relationship between long-term debt to total assets ratio and financial performance and findings of Rafiu, Taiwo and Dauda (2012) who reported positive significant relationship between long-term debt to total asset and firms' financial performance. The result is however in contrast with the findings of Karadeniz et al (2012), Khalaf (2013) and Amara and Bilal (2014) who found that total debt to total assets is positively and insignificantly associated with performance of firms.

The combined and overall effect of the predictor variables on the explained variable showed that the model is adequate and free from misspecification. The Wald Chi2 value of 37.67 with Prob. Chi2 of 0.0000 which is significant at 5% level of significance shows that the model is well fitted with the variables of the study. Furthermore, the coefficient of determination R^2 which stands at 50% indicates the proportion of the total variation in dependent variable (return on assets) that is explained by the independent variables. This signifies that 50% of the total variation in financial performance of listed manufacturing firms in Nigeria is caused by the combined effect of the ratios of total debt to total assets, total debt to total equity, long term debt to total asset and short term debt to total assets; while the remaining 50% is caused by other factors not captured in the model of the study.

CONCLUSION AND RECOMMENDATIONS

As a corollary of the discussion and analysis in the preceding chapter, the study concludes as follows:

Firstly, the study found a negative significant association between total debt to total assets ratio and financial performance. It is therefore concluded that total debt to total asset is one of the variables of capital structure that contribute in influencing financial performance of listed manufacturing firms in Nigeria. In addition, the study found a negative insignificant association between total debt to total equity ratio and financial performance of listed manufacturing firms in Nigeria. Thus, the study concluded that total debt to total equity is not one of the factors that influence the financial performance of listed manufacturing firms in Nigeria. Finally, long-term debt to total assets ratio was found to have negative significant impact on financial performance of listed manufacturing firms in Nigeria. The study therefore, concluded that long-term debt to total assets ratio is one of the strong determinants of the financial performance of listed manufacturing firms in Nigeria. In line with the findings of the study, the following recommendations are made:

- i. The management of listed manufacturing firms should reduce the level of total debt to total assets and long-term debt to total assets in their capital structure components, because they affect their financial performance negatively.
- ii. The management of Nigerian listed manufacturing firms should work very hard to optimize the capital structure of their listed manufacturing firms in order to increase the financial performance. They can do that through ensuring that their capital structure is optimal.

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Effect of Gender Mix on Earnings Management of Listed Foods and Beverages Firms in Nigeria

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Abstract

The study is an assessment of the effect of Gender Mix on Earnings Management of listed food and beverage firms in Nigeria for the period 2011-2020. The correlational research design was adopted and the population of the listed firms is 23. The purposive sampling techniques was employed in selecting the 15 firms after eliminating firms that don't meet the set criteria. Secondary data were collected from the annual reports of the sampled firms. EM was proxied by discretionary accrual while gender mix was proxied by proportion of female director. Panel regression was used to analyse. The finding shows that gender mix has no significant impact on earnings management. The study conclude that board characteristics has an insignificantly negative effect on discretionary accruals and does not substantially reduces the discretionary accruals of listed food and beverage firms in Nigeria. The study recommend that Individuals, partnership business, shareholders and government who employ the services of board of directors in Nigeria should ensure that the board members have the competence and experience and that can be brought to bear positively on the organization. This is because board competence are associated with less earnings management of manufacturing firms in Nigerian. Those who are saddled with the responsibility of appointing board members in Nigeria should consider competence and experience of the individuals, as this will go a long way to reduce the earnings management activities in the company.

Keywords: Gender Mix, Female Director, Earning Management, Firms, Investor

INTRODUCTION

Earning is one of the most important items in financial statements and this is because, users of financial statements mostly focus on the company's earnings before looking at other variables. Earnings represent the image of a company on the eyes of many investors and other financial statements' users for decision-making purposes. Earnings indicate the extent to which a company has engaged in value added activities. Therefore, increase in earnings represents an increase in company's value, while decrease in earnings signals a decrease in that value (Lev, 1989). Accounting deals with measurement and communication of economic information that involves the determination of net income (accounting earnings). Accounting's earnings serve as a major constituent of corporate information required in the capital market for assessing firm performance and for stock valuation (Musa, Ibikunle & Oba, 2013). Therefore, accounting earnings information need to be more reliable. This is because, the integrity of financial reports depends on the reliability of earnings being reported by firms and the capital market needs precise and unbiased financial reporting to value securities and revive investor's confidence (Roodposhti & Chasmi, 2011). The only source through which information is passed from the principal to the owners is through financial

statement. A reliable financial statement is expected to provide vital information to investors to enable them make the right business decisions. A reliable financial statement is assumed to provide information free from errors and bias that would enable users to make accurate judgment regarding the information (Shehu, 2013). Moreover, the responsibility for preparing and publishing external information lies with the firm's managers. As such, managers too use their knowledge of the firm and the current state of business circumstance to prepare information that gives a true and fair view of the firm's financial state and performance. However, due to information asymmetry, managers may use their own discretion in preparing and reporting financial statement to their own advantage (Scott, 2003). This may give rise to agency problem. Agency problem is said to have existed when managers fail to act in the best interest of the owners. The existence of agency problem results from separation between ownership and control; as managers would have more inside information than the financial providers (shareholders). Evidence from literature reveals that managers use their discretion over accounting numbers to achieve private gain; and flexibility of accounting standard usually gives room for them to adjust earnings through managing accruals. Managers have many incentives to manage earnings like compensation, avoid debt covenant violation, meeting and beating benchmark, reducing regulatory or political cost, to meet analysts' expectations and to make a firm appears a less risky investment (Kasznik, 1999 and Trueman&Titman, 1988). Bunamin, Abdulrauf, Johari & Abdulrahman (2012) have the notion that Earnings Management with the intention to manage users' perception in firms are considered unethical even if no accounting standards are violated. Hence, Earnings Management has the propensity to mislead which may be difficult to detect by ordinary people who do not have requisite knowledge on the issue relating to accounting numbers.

Earnings manipulation makes financial reporting to be of less quality and reduces the level of confidence of investors in their decision making process (Shehu&Abubakar, 2012). Nowadays, most users of financial statement do not count accounting earnings as a major yardstick for performance evaluation as well as for decision-making. Evidences from literature and financial scandals around the globe prove that Earnings Management reduces investors' confidence. On the other hand, Board of Directors are regarded as an important internal corporate mechanism responsible for mitigating agency conflicts between managers and shareholders by helping in constraining the level of Earnings Management. Therefore, one of the major roles of Board of Directors is to monitor and reduce the incidence of Earnings Management (Hashim, Ariff&Salleh, 2013). They are responsible for monitoring managers on behalf of shareholders and overseeing the financial reporting processes. Composing Board of Directors with diverse knowledge, skills, gender, and function is an important determinant of effective board for carrying out its monitoring function. Board composition includes the determination of the proportion of independent and executive directors, mix of qualification and expertise, designating audit, proportion of female directors on the board and number of Board Meetings (Man, 2012; Bertrand & Mullainathan, 2001). Several studies suggest that both the informativeness of reported earnings and firm's performance are affected by Board of Directors' attributes such as the board size, board independence, frequency of Board Meetings, Board of Directors' competencies and managerial ownership (Vafeas 1999; Klein 2012; Hermalin&Wesberch 2012). Therefore, they are expected to monitor and control the behaviours of managers to ensure they act based on the shareholders' interest. Although, a lot of literature suggest that effective board helps reduce Earnings Management, but issues related to corporate governance and Earnings Management are inconclusive. This is because many corporates failure witnessed around the globe occurred in the developed countries, where they have more sophisticated, and sound corporate governance system. And the Board of Directors were mostly held responsible for failure to control the activities of managers. Despite there is these arguments in favour of women directorship, in reality, their representation in the foods and beverages firms' team of board of directors is very

low, as some firms within the sector did not provide even a single seat for women. Even those that provided the seat for them their proportion is very low. The objective of the study is to examine effect of gender mix on earnings management of listed food and beverage firm in Nigeria and the underlisted hypothesis is that which is fundamental to this study.

H₀₁: Gender mix has negative effect on the earnings management of food and beverage firm in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Gender Mix

Reasonable argument drawn from agency theory suggests that gender and ethnic diversity can have either a positive, negative or neutral influence on a firm's performance (Carter, Simkins & Simpson, 2010). Women participation in the corporate board has been increasing. In the past five years, seven countries have passed legislation mandating female board representation and eight have set non-mandatory target (Suisse, 2012). Pearce & Zahra (1991) argue that a representation of diverse interest including the number of females and minority members is an important characteristic of an effective board. Adams, Gray & Nowland (2010) find that the gender of directors appears to be value-relevant and suggest that appointing female directors may help resolve value-decreasing stakeholders' conflict. Diversity in agency due to diversity in groups results in creating balance in the board and prevent from violence of members. It is high possible that women members in the board would challenge about different subjects or specific management decision by their questions and they would result into clear issues (Moradi, *et al.* 2013). Adams & Ferreira (2009) argue that female directors can better monitor managers' behaviour. Hence, they can improve the quality of firms earnings, as they have better communication, used more informed decisions, and independent thinking (Tsui, *et al.* 2011). Female directors can think more independently compared with male directors and also effectively monitor CEO behaviour (Carter, *et al.* 2003). Furthermore, female directors are more likely less tolerant than male directors to opportunistic activities under supervision (Man, 2012). Tsui, *et al.* (2011) states that female directors can improve board governance which is more likely to improve earnings quality. Therefore, female representation of board can actually reduce the extent of Earnings Management because they can develop trust leadership, which requires managers to share information, and they are risk averse for fraud and opportunistic Earnings Management. On the contrary, some researchers suggest that women directors are only appointed for symbolic rather than for substantive reasons.

Cornet and Warlard (2008) defined diversity as a set of personal, social, and organizational characteristics that contribute to the development of identity and personality of individuals. At the organizational level, it can be illustrated through an equal representation of men and women in the top of the hierarchy as well as equal treatment that would guarantee social justice and dismantle all form of discrimination (Campbell & Miguez-Vera, 2008). Women have been gaining ground on corporate board, yet the effect of women on corporate performance is a matter of some debates. A survey by catalyst (2009) shows that during the year 2008 and 2009, women represented 15% of the board seats of fortune 500 companies; and 90% of these companies have at least one woman in their corporate boards while 20% have more than 3 women. Studies using data find that gender diversity on boards is associated with greater profitability. Adam & Ferreira (2009) find that female directors can be better monitor of managers' behaviour through board input such as attendance. Gulzar & Wang (2011) describe that the studies evidence the emergence of an issue of board sex diversity in corporate governance literature started from the last few years. Several studies have recently focused that the female member in the board can affect the firms' performance. However, some studies suggest that firm performance has no significant impact with board gender

diversity. Carter, Simkins& Simpson (2003) argue that women may improve decision making of the board. Fondas&Sassalos (2000) argue that heterogeneous board is more efficient than homogenous board.

Earnings Management

Earnings Management assumes various terminologies: creative accounting, financial re-engineering, and accounting magic. Schipper (1989) defines Earnings Management as disclosure management in the sense of purposefully intervention in the external reporting process, with the intent of obtaining some private gain. According to Healy &Wahlen (1999), the most important reason why managers engage in the management of earnings is to enhance their compensation as well as safeguarding their job. This shows that managers are sometimes rewarded based on their contribution and performance. Therefore, there is likelihood that managers would engage in income-increasing Earnings Management. This is possible due to flexibility in accounting standard. Apart from the reward they could receive it may at the same time enable them safeguard their job from the eyes of the law and the owner of the business. This is because owners have no in-depth knowledge of the status of their investment. Healy &Wahlen (1999) also defined Earnings Management as a situation that occur when managers use their judgment in financial reporting and restructuring transaction to alter financial reports to mislead the stakeholders about the actual and true economic performance of an enterprises as well as to influence contractual outcome that depends on the reported earnings. Earnings Management is an anticipatory step to keep away from defaulting in a loan agreement reduce regulatory cost and increase regulatory benefit (Cornett, Marcus & Tehran, 2008). Therefore, firms are expected to report positive earnings figure. Earnings Management do occur for many reasons, some of which are to: Manage earnings with the view of influencing stock market perception; Increase their (managers) compensation and bonus; Avoid breach of loan agreement; Avoid regulatory intervention (Teoh, Welch & Wong, 1998) and to; Avoid negative earnings surprises (Matsumoto, 2002) with the management could engage in Earnings Management to avoid reporting losses and earnings declines.

According to Teoh, (1998), managers have several windows of opportunities to manipulate earnings within the boundary of Generally Accepted Accounting Principle. They can choose an accounting method to advance or delay the recognition of revenues and expenses, use discretionary aspects of the application of the chosen accounting method, or adjust the timing of asset acquisitions and dispositions to alter reported earnings. Bunamin (2012) described that any attempt to manipulate earnings to mislead users' perception is regarded as unethical even though no accounting standards are violated. This is because majority of respondent do not believe that earnings manipulation is ethical (Rafik, 2002). According to Kassem (2012) many financial analysts believe that Earnings Management is harmful. This is because it tends to conceal the actual result of the companies' earnings; and it also shows that any attempt by the managers to use whatever means even if the means is approved accounting standard, or otherwise, is considered to be unethical and it erodes the quality of financial reporting. According to Gulzar& Wang (2011), Earnings Management unlike fraud involves selection of accounting procedure and estimates that conform to Generally Accepted Accounting Principle (GAAP). It occurs within the bound of accepted accounting procedure. This kind of Earnings Management that is consistent with Generally Accepted Accounting Principle (GAAP) is not regarded as fraudulent financial reporting. Although, there is fear that management may cross border from the true Earnings Management to fraud. However, once it can be determined that, the management manipulated earnings with the intention of deceiving the perception of investors is regarded as unethical and fraudulent act by many analysts.

Modugu andDabor (2013) referred to Earnings Management as the use of accounting techniques to produce financial reports that tend to present overly positive image of company's economic performance. This indicates that companies employ income-smoothing techniques to smoothen out fluctuation in earnings to meet analyst expectation. Based on their definition it indicates that Earnings Management are normally adjusted upward to reflect persistent earnings or increased in earnings. Dechow & Skinners (2000) believe that accounting practitioners and regulators view Earnings Management as a problem that needs an immediate control action. While some on the other hand believe that Earnings Management

practice by some firms benefits investors. Healy & Wahlen (1999) argue that financial reporting can increase firms' value if economic earnings and firm performance is reliable and available on time. Opportunistic Earnings Management literature, originated with Healy (1985). The study concluded that managers use accruals to strategically manipulate bonus income. For example, managers can smooth earnings by deferring income through accruals when an earnings target for a bonus plan cannot be reached or when bonus have already reached maximum level and can accelerate income in other periods. Earnings Management may be defined as reasonable and legal management decision making and reporting intended to achieve stable and predictable financial result. Large numbers of companies are using Earnings Management to steady earnings growth or to avoid reporting red ink. A common criticism of Earnings Management is that it reduces transparency by obscuring the true earnings of the company.

Methods of Earnings Management

Amart, Blake & Dowds (1999) identified various methods of earnings management (Creative Accounting)

- i. **Accounting Choices:** Accounting choices are made within the framework of Generally Accepted Accounting Principle (GAAP). GAAP are set of rules, practices and convention that described what is acceptable financial reporting for external stakeholders. A firm is allowed to choose between different methods of treating certain transaction within the framework of Generally Accepted Accounting Principle (GAAP). Therefore, a company can choose the accounting policies that give a preferred image. Managers are free to choose an accounting estimates or method that would favour their reporting.
- ii. **Artificial transaction:** This can be entered into to manipulate monetary value of items in the balance sheet and to move profits between accounting periods.
- iii. **Genuine transaction** can also be timed to give the desired impression in the account.
- iv. **Certain entries in the account involve unavoidable degree of estimation, judgment, and prediction** without limit in the Generally Accepted Accounting Principles. The problem with many accounting choice is that there is no clear posted limit beyond which a choice is obviously illegal. Generally Accepted Accounting Principle does not tell managers what specifically is normal and what is extreme. Product of warranty cost estimation is an example of accounting decision many managers have to make.

Therefore, Earnings Management activities occur because of flexibility in making accounting or operating choices and or/because managers are trying to convey private information to financial statement users. Managers can opportunistically manipulate accounting reports by managing accruals. According to Kaplan (1985), normal accruals arising from the ordinary course of business may not reflect earnings manipulation. As such, any manipulation of earnings is likely to manifest in abnormal accruals.

Most studies on Earnings Management focus on two types of Earnings Management: accrual management and the manipulation of real economic activities. For accruals management, a firm may decide to use provisions for warranty cost, inventory values, credit losses, and the timing of an amount of unusual items. On the other hand, manipulation of real economic activities is regarded as costly to affect firm's long-term interest. Schipper (1989) argues that it is very costly to determine Earnings Management tactics. She further argues that even more visible Earnings Management techniques like change in accounting policies and timing of capitalization are difficult to interpret. Recent studies show that top managers' compensation is linked to firm performance that is associated to higher Earnings Management (Cornett, 2008). Since managers have inside information, they have opportunities to manage net income to maximize their bonuses (Healy 1985) on the contractual motivation. Furthermore, managers may manage earnings to increase net income at the expense of future earnings in order to secure their job (Defond & Park, 1997). Also managers can manage earnings to avoid debt covenants. Firms are more likely to avoid

reporting losses by managing earnings; otherwise, they could violate covenants and face higher cost. Also they may overstate earnings in order to meet analysts forecast (Man & Wong, 2013)

Empirical Literature

Abdullahi, Norfadzilah, Umar and Lateef (2020) examine financial determinants of Earnings Management and the profitability of listed companies in Nigeria. The objective is to investigate the level of financial determinants of Earnings Management on the profitability of companies. This study employed a panel data approach on 84 listed companies on the NSE with 756 firm-year observations for the period 2010-2018 financial years. The study employs a secondary method to retrieve data from annual statement of listed companies and Thompson Reuters DataStream. The data is analysed with the using multiple regression to examine the model. The current study reveals that earnings ability shows a significant and positively related to the profitability, which was measured using ROA. This result from this study indicates that the more the earnings ability of a company, the profitability of the listed companies in Nigeria will increase. Financial structure ability shows a significant negative association with the ROA. This further indicates that any increase in financial structure ability, profitability of listed companies in Nigeria will also increase in the same value. Furthermore, the statistical results offer evidence that non-financial factor is positively and significantly associated with the ROA. This implies that a percentage increase in non-financial factor will result in the increase of profitability of listed companies in Nigeria. The result also indicates that companies that engaged in financial determinants of Earnings Management are also seen to be more profitable. Overall, this present study explains the connection between the financial determinants of earnings management and the profitability of listed companies in Nigeria. Hosan, Eko and Wuryan (2019), examine impact on Earnings Management among the international Oil and Gas Corporation in the world. The Board Characteristics such as (board independence, board size, board diversity, and CEO duality). This study applied a quantitative research approach, secondary data, a sample of 71 corporations were selected from Top 250 corporations for one year (2016). The findings of this study indicated that the board independence has a significant impact on the reduction of earnings management. In contrast, the board size does not have any impact on the reduction of earnings management, due the larger the board size less efficient on monitoring of the board, when there are more members on the board it is more difficult for the board members to monitor the management, While gender diversity has a significant impact on the reduction of earnings management, Finally, The CEO Duality has a significant impact on the increase of earnings management, which means the separating the functions of CEO and Chair of the Board may enhance the Board of Directors' monitoring and control ability, and improve Directors' information processing capacities.

Siyanbola, Ogbebor, Okeke and Okunade (2019), examined the effect of Corporate Governance on Reported Earnings Quality in Nigerian deposit money banks. Cross sectional data were obtained from Ten (10) listed deposit money banks in Nigerian Stock Exchange for over a period of ten years (2008-2017). The data were analyzed using both descriptive and inferential statistics. Earnings predictability was adopted as a proxy for reported earnings quality, while board size, board independence, foreign directorship and firm size were used as proxies for corporate governance. The study found board size having a positive and insignificant relationship with earnings quality; a negative and insignificant relationship between board independence and earnings quality; a positive and significant relationship between foreign directors on board and earnings quality; and also a negative and insignificant relationship between firm size and earnings quality. It was therefore recommended that deposit money banks should

increase both their board size and number of foreign directors on board as these will enhance their reported earnings quality. Manukaji andIjeoma (2018) examined corporate governance mechanism and income smoothing on deposit money banks in Nigeria. This study became necessary following the increasing failures of deposit money banks in Nigeria upon the clean bill of health given to them by both internal and external auditors. The study aimed to examine the relationship corporate governance mechanism (CEO duality, board size, ownership concentration and audit committee) and income smoothing. Firm size and leverage were introduced as control variables. This study is anchored on agency theory. The study adopted ex post facto research design. Four deposit money banks were studied for the period ranging from 2012 to 2016. Eckel (1981) index was employed in determining income smoothing. Multiple regression analysis was employed in analyzing the data. The study suggests that income smoothing of deposit money banks largely depends on the corporate governance mechanisms, particularly in the form CEO duality, ownership concentration and the existence of audit committee. Banks with ownership concentration may have higher propensity to smooth income. The empirical results also demonstrate that board size is not effective in monitoring income smoothing. The study concludes that corporate governance has significant relationship with income smoothing in Nigeria deposit money banks. The study contends that corporate governance mechanism should be strictly adhered to by the banks in order to reduce the incidence of artificial income smoothing. This will help to improve the quality and reliability of accounting information in deposit money banks in Nigeria. The study is however limited to one sector of the economy- banking. A study of listed companies could provide greater understanding on the relationship between board size and earnings management in Nigeria.

Norfarah and Binti (2017), examine the association between board of directors' characteristics and earnings management among Malaysian family owned companies. This study uses 184 family owned companies that are listed on main market of Bursa Malaysia from 2009 until 2012 with total observations of 736 companies' years. The board of directors' characteristics mainly focuses on board independence, CEO duality, board size, multiple directorships and frequency of board meeting. Two measurements of discretionary accruals (modified Jones Model and Performance matched discretionary accruals model) are selected to calculate earnings management. In testing the relationship, this study uses ordinary least square regression and the finding indicates that only board independence and board meeting have statistically significant positive relationships with earnings management. This indicates that board independence might be ineffective to control earnings management in family owned companies. Higher frequency of board meeting is also not effective in monitoring earnings management activities in family owned companies in Malaysia which is in contrast with agency theory. It can be concluded that with regards to board matters, Malaysian Code of Corporate Governance only supports non-family owned companies in controlling the opportunistic behaviour among managers from engaging the earnings management activities. Imoleayo, Eddy and Olamide (2016), examine earnings management and board structure: Evidence from Nigeria; the study evaluate the role of board structure plays in curtailing earnings management practices in Nigerian companies. This study sampled the data of 137 quoted companies for a period of 8 years (2003-2010). Earnings management was measured using the magnitude of the discretionary accruals as estimated by the performance matched modified Jones model. The ordinary least squares (OLS) regression technique was used to measure the research model as well as the Pearson moment correlation coefficient. The study shows that there is a significant relationship between board structure and earnings management practices in Nigeria. The study shows that there is a negative significant relationship between board size, gender, and board composition with earnings management; also, there is a positive significant relationship between board meeting and earnings management practices in Nigeria. There is a positive nonsignificant relationship between the presence of a remuneration committee and the dualization of CEO and chairman positions with earnings management practices in Nigeria. The scope and methodology are limited to 8 years and the data are obtained were too old to have meaningful bearing to current reality.

Theoretical Framework

Stakeholders Theory

Stakeholder theory was developed by Freeman (1984) who argue that organizations are accountable to the shareholders as well as other stakeholders which in contrary to the traditional view that shareholders were the only stakeholders of the firm. Stakeholders are groups of individuals who may benefit or be harmed by activities of the firm. These stakeholders have contracting interest which have to be taken into account when releasing the audit reports. This is important because their varying interests can affect the firm's ability to achieve its objectives (Freeman, 2001). The stakeholder theory is defined (by Freeman 1984, quoted in Schilling 2000) as any group or individual who can influence or is influenced by the achievement of the organization's objectives. So (Carroll 1993, quoted in Schilling 2000) add that the term stakeholder may, therefore, include a large group of participants, in fact anyone who has a direct or indirect stake in the business. Examples for direct stakeholders are the shareholders, employees, investors, customers and suppliers, all whose interests are aligned with the interests of the firm, on the other side, the indirect stakeholders are those who are indirectly affected by the functions of the firm and an example for the is the government (Kiel & Nicholson 2003).

Another definition for the stakeholder theory is that "the Stakeholder theory defines organizations as multilateral agreements between the enterprise and its multiple stakeholders". The stakeholders can be divided into two groups, the internal group consists of the employees, managers and the owners while the external group includes customers, suppliers and the community, the relation between the firm and those stakeholders group is controlled by different types of rules (Clarke 2004). In addition, (Mitchell; 1997) argue that stakeholders can be identified by three different attributes, the first is their power to influence the firm, the second is the legitimacy of relationship with the firm, and the third attribute is the importance of the stakeholders claim on the firm. Stakeholders are defined as the groups or individuals whose goals are recognized by a firm or those who influence the firm's goal attainment. These groups include employees, clients, suppliers, banks, local government and agencies, political parties and community organizations. Back in the 1970s and 1980s large national firms were becoming too powerful and their power went beyond the stakeholders' including the government so this raised the awareness of the stakeholder theory that helped raise the social awareness.

Agency Theory

Agency theory is defined by (Jensen and Meckling 1976) as the theory that addresses the relationship where in a contract the principal engages another person called the agent to perform some service on their behalf which involves delegating some decision making authority to the agent. Agency problem occurs when the objectives of the principal and agent contradict and it is difficult and costly for the principal to detect what the agent is actually doing. Also, due to this separation of ownership, managers usually focus on their own personal gains and interests and forget about the shareholder's interest which ultimately leads to the agency problem as well as incurring costs that the owners bare at the end, and this is referred to the agency cost. It is added by (Jensen & Meckling 1976) that these contradictions are because of the inability of the shareholders to monitor the actions and the performance of the management. Moreover, (Leuz;2003) state that the pursuit of self-interest by the managers, increases costs to the firm, like the costs of forming a contract, loss due to decisions being taken by the agents and the costs of observing and controlling the actions of the agents. Therefore the effects of such behavior are ultimately reflected in the company's earnings.

METHODOLOGY

The methodology employed is the correlational research design. Correlational study tries to measure the degree of relationship between one or more variables for making predictions about relationship. The target population of the study comprised twenty three (23) food and beverage in Nigeria between the years

2011-2020, however fifteen (15) firm were selected using purposive sampling technique . The study employed secondary data collection. The study variables were obtained from published audited financial report of these firm, for the financial periods stated.

Procedure for Data Analysis and Model Specification

Two method of data analysis were in this study. The first method is descriptive analysis, this includes; descriptive statistics and inferential statistics analysis. This analysis involve; correlation analysis which will be conducted to determine the strength of the linear association between gender mix (GM) on earnings management (EM) of quoted firms in Nigeria. The major reason for using regression and correlation analysis is to be able to model, examine and identify the relationship between the hypotheses. The inferential analyses will also involve the application the appropriate statistical technique of Panel Regression Analysis; this is due to the nature of the data

Regression Model

$$DACC = \beta_0 + \beta_1 BC + \beta_2 BMF + \beta_3 GM + \epsilon_{it} \dots \dots \dots (1)$$

Where:

β_0 = The autonomous parameter estimate (Intercept or constant term)

$\beta_1 - \beta_3$ = Parameter coefficient of Board Characteristics

DACC= Discretionary Accruals

BC = Board Competency

BMF = Board Meeting Frequency

GM = Gender Mix

ϵ_{it} = Stochastic Error term

Measurement of variables

Earning Management = measured using discretionary accruals (DACC)

Gender Mix = Proportion of female board of director to total board of directors

Descriptive Statistics

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations obtainable. The table below shows the descriptive statistics for the variables applied in the study. An analysis of all variables was obtained using the E-view 10 software for the period under review.

Table 1 Descriptive Statistics Result

| | DACC | BC | BMF | GM |
|-------------|----------|----------|----------|----------|
| Mean | 0.218807 | 0.023067 | 4.206667 | 0.010000 |
| Median | 0.187450 | 0.020000 | 4.000000 | 0.010000 |
| Maximum | 1.559500 | 0.050000 | 6.000000 | 0.030000 |
| Minimum | 0.035600 | 0.010000 | 3.000000 | 0.000000 |
| Std. Dev. | 0.151895 | 0.010488 | 0.508936 | 0.007508 |
| Skewness | 5.016065 | 0.553903 | 2.132622 | 0.286351 |
| Kurtosis | 42.30907 | 2.634632 | 7.283694 | 2.551020 |
| Jarque-Bera | 10286.54 | 8.504547 | 228.3896 | 3.309819 |
| Probability | 0.000000 | 0.014232 | 0.000000 | 0.191109 |

| | | | | |
|--------------|----------|----------|----------|----------|
| Sum | 32.82100 | 3.460000 | 631.0000 | 1.500000 |
| Sum Sq. Dev. | 3.437732 | 0.016389 | 38.59333 | 0.008400 |
| Observations | 150 | 150 | 150 | 150 |

Source: E-View 10 Output (2021)

Descriptive statistics of effect of Board Characteristics on Earnings Management of listed foods and beverages firms in Nigeria during the period of 2011 to 2020. The table shows that Discretionary Accruals (DACC) as a measure of Earnings management has a mean of 0.218807 with a standard deviation of 0.151895 and the minimum and maximum values of 0.035600 and 1.559500 respectively. Although the range between the minimum and maximum is wide, it implies a stable performance as the standard deviation indicated that there is no wide dispersion of the data from the mean value.

Also the mean values for gender mix (GM) is 0.010000, while the standard deviations also indicates 0.007508. The minimum and maximum value for gender mix is 0.000000 and 0.030000 respectively.

The standard deviation values shown on table 4.1 indicate the dispersion or spread in the data series. The higher the value of the standard deviation, the wider the deviation of the series from its mean. Similarly, the smaller the value of the standard deviation, the lower the deviation of the series from its mean. The variable with the highest degree of dispersion from the mean is the board meeting frequency. Skewness which measures the shape of the distribution and equally shows the measure of the symmetry of the data set, indicated that DACC and BMF are all positively skewed and have values greater than zero which suggests that the distribution tails to the right-hand side of the mean, except for BC and GM, which though is not negatively skewed, have values less than one. Hence, the distributions of four of the variables (DACC, BC BMF and GM) are positively skewed, considering that their values are greater than zero, in addition to the fact that their mean are greater than their median, while the case is different for GM with a median of 0.010000 (exactly the same with the mean).

Fixed Effect Likelihood Ratio Test

The Fixed Effect Likelihood Ratio test is a test for model specification in panel data analysis and this test is employed to choose between pooledeffect model and the fixed effects model. Due to the panel nature of the data set, both pooledeffect and fixedeffect regressions were run (as shown in appendix 4 and 5 as attached). Fixed effect likelihood ratiospecification test was then conducted to choose the preferred model between the pooledeffect and the fixedeffect regression models. The test basically checked if the error terms were correlated with the regressors. Thus, the decision rule for the fixed effect likelihood ratiospecification is stated thus; at 5% Level of significance:

H_0 : Pooled effect is most appropriate for the Panel Regression analysis

H_1 : Fixed effect is not appropriate for the Panel Regression analysis

As encapsulated above, if the p-value is greater than 0.05 the decision rule is to reject the null hypothesis which states that pooled effect is most appropriate for the Panel Regression analysis (meaning that the preferred model is fixed effects). Similarly, if the p-value is less than 0.05 the decision rule is to accept the null hypothesis which states that pooled effect is most appropriate for the Panel Regression analysis (meaning that the fixed effect model is to be rejected).

Table 2: Fixed Effect Likelihood Ratio Table

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

| Effects Test | Statistic | d.f. | Prob. |
|--------------------------|-----------|----------|--------|
| Cross-section F | 1.481099 | (14,132) | 0.1265 |
| Cross-section Chi-square | 21.885752 | 14 | 0.0110 |

Source: E-View 10 Output (2021)

The Result of fixed effect likelihood ratio test shows that chi-square statistics value is 21.885752 while the probability values of is 0.0110. This implies that there is enough evidence to reject the null hypothesis which states that pooled effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (pooled effect) estimator is not appropriate because the pooled effects are probably correlated with one or more regressors. Thus, the most consistent and efficient estimation for the study, given the options of a pooled effect analysis and a fixed effect analysis, is the fixedeffect model of regression analysis. Consequently, the result suggests that the fixedeffect regression model is most appropriate for the sampled data (given the two options as encapsulated above), because the likelihood ratio test statistics as represented by corresponding probability value is greater than 5%. It is most logical therefore to proceed to another test which is the hausman test, which will show the appropriateness of otherwise of using the fixed effect model or the random effect model.

Table 3: Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|----------------------|----------------------|--------------|--------|
| Cross-section random | 2.946795 | 3 | 0.3999 |

Source: E-View 10 Output (2021)

The Result of Hausman test shows that chi-square statistics value is 2.946795 while the probability values of is 0.3999. This implies that there is enough evidence to accept the null hypothesis which states that random effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (random effect) estimator is most appropriate because the random effects are well correlated with the regressors. Thus, the most consistent and efficient estimation for the study is the Random effect cross-sectional model. Consequently, the result suggests that the random effect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is greater than 5%.

Table 4: Panel Regression Result (Random Effect)

Dependent Variable: DACC

Method: Panel EGLS (Cross-section random effects)

Date: 04/26/21 Time: 22:38

Sample: 2011 2020

Periods included: 10

Cross-sections included: 15

Total panel (balanced) observations: 150

Swamy and Arora estimator of component variances

| Variable | Coefficient | t | Std. Error | t-Statistic | Prob. |
|----------|-------------|---|------------|-------------|-------|
|----------|-------------|---|------------|-------------|-------|

| | | | | |
|-----------------------|-----------|--------------------|-----------|--------|
| C | 0.312198 | 0.112697 | 2.770237 | 0.0063 |
| BC | 1.695712 | 1.255695 | 1.350417 | 0.1790 |
| BMF | -0.026592 | 0.024715 | -1.075954 | 0.2837 |
| GM | -2.064176 | 1.673189 | -1.233678 | 0.2193 |
| Effects Specification | | | | |
| | | | S.D. | Rho |
| Cross-section random | | | 0.033660 | 0.0490 |
| Idiosyncratic random | | | 0.148292 | 0.9510 |
| Weighted Statistics | | | | |
| R-squared | 0.028939 | Mean dependent var | 0.177756 | |
| Adjusted R-squared | 0.008986 | S.D. dependent var | 0.148936 | |
| S.E. of regression | 0.148265 | Sum squared resid | 3.209462 | |
| F-statistic | 1.450354 | Durbin-Watson stat | 1.459489 | |
| Prob(F-statistic) | 0.230637 | | | |

Source: E-View 10 Output (2021)

From table 4. above, the coefficient of multiple determinations (R^2) is 0.028939. This indicates that about 0.02% of the total variations in Discretionary Accruals is explained by the variations in the independent variables (BC, BMF and GM), while the remaining 0.99% of the variation in the model is captured by the error term. This indicates that the line of best fit is not highly fitted. The standard error test is applied in order to measure the size of the error and determine the degree of confidence in the validity of the estimates. Usually if the standard error is smaller than half the numerical value of the parameter estimate, it can be concluded that the estimate is statistically significant. The parameter estimate for GM is not statistically significant, given that the individual probability is 0.2193 which is also greater than 5%. Similarly when taken collectively the value of F-statistic is 1.450354 and the value of the probability of F-statistic is 0.230637. This result implies that the overall regression is though positive and but not statistically significant at 5%.

The coefficient of board competence (BC) is 1.695712, while that of board meeting frequency (BMF) and gender mix (GM) -0.026592 and -2.064176 respectively. This shows that BC is positively related to DACC, while BMF and GM is negatively and insignificantly related to DACC such that a unit increase in BC will increase DACC slightly. This result is inconsistent with 'a priori' expectation which hypothesizes that increase in BC, BMF and GM will lead to a significant increase in DACC and the empirical evidence suggests that the relationship between BC, BMF, GM and DACC is not statistically significant. Consequently, when taken collectively and based on the probability (F-Statistics) value of 0.230637, which is greater than 0.05, the three null hypothesis of the study is hereby accepted. In other words, the empirical analysis of the study shows that there is evidence to posit that the hypothesis that Gender Mix does not have significant effect on Earnings Management of listed foods and beverages firms in Nigeria is hereby accepted.

Discussion of Findings

This study succinctly examined effect of Gender Mix on Earnings Management of listed foods and beverages firms in Nigeria using panel series data and regression analysis approach. The board auditor characteristics proxied by gender mix (GM) for fifteen (15) listed foods and beverages firms for 10 years ranging from 2011 to 2020 were the independent variables while the Discretionary Accruals (used to proxy Earnings Management) was the dependent variable for the study. The effect of the independent variable on each dependent variable was analyzed in terms of strength and significant and the panel

regression analysis was used to compare the relationship among the variables. The result for the model of the study (which is a direct consequence of the first, second and third objectives and hypothesis of the study) showed that when taken individually and collectively, board competency, board meeting frequency and gender mix taken as the measure of board characteristics has a negative and insignificant effect on discretionary accruals taken as a measure of earnings management. This implies that board characteristics is an insignificantly and non-relevant predictor of earnings management in listed food and beverage firms in Nigeria. That is to say there are empirical evidences to suggest that the attributes exhibited by board, which naturally should promote transparency in manufacturing firms financial dealings in Nigeria, is not yet having the desired effect. As such, the boards of the listed firms have still not been able to exert the needed level of influence that is required to improve the tendencies of earnings management framework of the food and beverage sector in Nigeria. This finding is in agreement with the research efforts of Siyanbola, Ogbemor, Okeke and Okunade R. (2019), who examined the effect of Corporate Governance on Reported Earnings Quality in Nigerian deposit money banks. In their work, cross sectional data were obtained from Ten (10) listed deposit money banks in Nigerian Stock Exchange for over a period of ten years (2008-2017) and the empirical results showed a negative and insignificant relationship between board characteristics and earnings quality. The result of the empirical findings of this study is also in line with the research efforts of Manukaji and Ijeoma (2018), who examined corporate governance mechanism and income smoothing on deposit money banks in Nigeria. The empirical results demonstrated clearly that board attributes is not effective in monitoring income smoothing and earnings management.

CONCLUSION AND RECOMMENDATIONS

The widespread failure in the financial disclosure has created the need to improve the financial information quality. Consequently, the factors influencing the occurrence of real earning management have been an intense and inconclusive area of research and an interesting issue of discourse. The conclusion of the study therefore is that board characteristics has an insignificantly negative effect on discretionary accruals and does not substantially reduces the discretionary accruals of listed food and beverage firms in Nigeria. The recommend that Individuals, partnership business, shareholders and government who employ the services of board of directors in Nigeria should ensure that the board members have the competence and experience and that can be brought to bear positively on the organization. This is because board competence are associated with less earnings management of manufacturing firms in Nigerian. Those who are saddled with the responsibility of appointing board members in Nigeria should consider competence and experience of the individuals, as this will go a long way to reduce the earnings management activities in the company.

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Impact of Capital Market Components on Economic Growth in Nigeria: An ARDL Approach

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Abstract

The study investigated the impact of capital market components on economic growth in Nigeria between 1981 and 2020. The data used for this study were sourced from CBN statistical bulletin, and World Bank development indicators. In order to avoid spurious regression effects, pre-estimation tests were performed on each of the variables using the Augmented Dickey Fuller (ADF) unit root test; while the empirical analysis was carried using the Autoregressive distributed lag (ARDL) error correction model method. The findings from the study showed that government securities have a significant impact on economic growth in Nigeria. The implication of this finding is that huge government bonds floated has contributed positively and significantly to the volume of goods and services traded within the economy and as such enhanced economic growth. The study also showed that corporate bond has a significant impact on economic growth in Nigeria. The findings from the study showed that equities have a significant impact on economic growth in Nigeria. The implication of this is that as new issues are raised and floated in the market, this in turn increases the number of shares traded and economic growth equally expands as well as impacting on the GDP. Based on these findings, the study recommends that there is the need for government to increase the amount of securities they issue in the market as its increase has positively and significantly improve the overall economic growth of the country. The volume of corporate bond transaction needs to be boosted by NSE through the introduction of more derivatives, convertibles, futures and options in the markets in order to be internationally competitive. To increase the number of listed companies there is need to ensure stable macroeconomic environment, to encourage foreign multinational companies or their subsidiaries to be listed on the Nigerian stock exchange and also to improve the trading system in order to increase the ease with which investors can purchase and sell shares.

Keywords: Corporate bonds, Equities, Government Securities and Economic growth

INTRODUCTION

Economic growth and development could only be experienced through a robust financial system that mobilizes short and long-term capital for industrial development. Financial capital, no doubt, plays a crucial role in production, distribution and exchange of goods and services in any economy. In fact, availability or shortage of it is a prime factor in determining whether an economy will develop or not. It is crystal clear that the dearth of long-term capital especially in the developing countries like Nigeria makes the capital market indispensable (Okpara, 2018). A capital market is an integral part of the financial system that provides an efficient delivery mechanism for mobilization and allocation, management and distribution of long-term funds. It is a network of financial institutions and infrastructure that interact to mobilise and allocate long-term funds for the economy. According to Gbosi (2019), the capital market is that part of the financial market which specialises in the mobilization of long-term funds for commerce and industry. Iyoha (2004) contends that the capital market plays a major role in promoting rapid economic growth and development. It affords business firms and government the opportunity to sell stock and bonds to raise long-term funds from the savings of other economic agents. The sourcing of long-term finance through the capital market is essentially for self-sustained economic growth. No doubt, an active capital market aids the mobilisation of savings for economic growth and development, encourages the efficient allocation of resources through changes in wealth ownership and composition, catalyses the creation of a healthy private sector and facilitates the promotion of rapid capital formation.

The capital market is a necessity for maintaining the competitiveness of today's economy given the increasing international competition spurred by rapid technological progress and an increased role of innovation. Importantly, the establishment of industries and their subsequent growth hinges on long-term capital which is usually source from the capital market. It is the transmission mechanism for oiling the wheels of industry. In fact, empirical evidence strongly suggests that a functioning capital market promotes long-term economic growth. The capital market is an important part of an efficient financial system, playing a key role in the development of nations (Anayafo, 2018).

Nigeria has a growing capital market, which has since its inception served as a veritable source of long-term funds to finance investment. In 1986, Nigeria embraced the International Monetary Fund (IMF)-World Bank Structural Adjustment Programme (SAP) which influenced the economic policies of the government and led to reforms in the late 1980s and early 1990s. The programme was proposed as an economic package to rapidly and effectively transform the Nigerian economy within two years (Yesufu, 2016). However, until SAP was abandoned in 1994, the objectives were not achieved due to the inability of a government to judiciously implement some of its policy measures (Oyefusi & Mogbolu, 2020). The notable reforms include monetary and fiscal policies, sectorial reforms such as removal of oil subsidy in 1988 to the tune of 80 percent, interest deregulation from August 1987, financial market reform and public sector reforms which entail the full or partial privatization and commercialization of about 111 public owned enterprises. The Nigerian Stock Exchange played a key role during the offer for sale of the shares of the affected enterprises. The introduction of Structural Adjustment Program (SAP) in Nigeria resulted in significant growth of the financial sector and the privatization exercise which exposed investors and companies to the significance of the stock market. The liberalization of capital market led tremendous changes with respect to volume, number of deals and value of securities traded as well as the number of securities listed in the market, yet there are concerns on its impact at the macro-economic level.

The linkage between capital market performance and economic growth has often generated strong controversy among analysts based on their study of developed and emerging markets (Kolapo & Adaramola, 2012). The determination of the growth of an economy depends on how efficiently the capital market performs its allocative function of capital. As the stock market mobilizes savings, concurrently it allocates a larger proportion of it to the firms with relatively high prospects as indicated by its rate of returns and level of risks (Alile, 2017). Despite this remarkable contribution of capital market in an economy, data from World Bank (2021) however showed that Nigeria recorded low RGDP growth rates. The real GDP growth of 2019 is 2.21 percent. Within the same period, Ghana recorded an RGDP growth rate of 6.26 percent in 2018 and 6.48 percent in 2019; while a country like India recorded a RGDP growth of 6.12 percent in 2018 and 5.02 percent in 2019. The Nigeria economy contracted by -3.62 per cent in Q3 2020, compared with -6.10 and 2.28 per cent in the previous quarter and corresponding period of 2019, respectively, thereby pushing the economy into recession (CBN, 2020). From the foregoing and in order to address the objectives of the study, the following hypotheses were raised and subsequently tested:

- H₀₁:** Government securities has no significant impact on economic growth in Nigeria
- H₀₂:** Corporate bonds has no significant impact on economic growth in Nigeria
- H₀₃:** Equities has no significant impact on economic growth in Nigeria

LITERATURE REVIEW

Conceptual Framework

Capital Market

Capital market is defined as an institution for buying and selling of long term debt or equity backed securities (Abdulahi, 2015). The capital market is a market that mobilizes long term resources, provides liquidity, risk diversification, privatization, securitization, or risk transfers and determination of the cost of capital for project evaluation (Chiwuba & Amos, 2018). Osannwonyi, (2019) sees capital market as an exchange system set up to deal on long term credit instrument of high quality. The dealing in this high-quality instrument facilitates the execution of some desirable and profitable project bearing direct relationship with economic development. Ariyo and Adelegan (2020) contend that, the liberalization of capital market contributes to the growth of the Nigeria capital market, yet its impact at the macro-economy is quite negligible. Okereke-Onyuike (2010) posits that the cheap source of funds from the capital remain a critical element in sustainable development of the economy. She enumerated the advantages of capital market financing to include no short repayment period as funds are held for medium- and long-term period or in perpetuity, funds to state and local government construct pressures and ample time to repay loans. The capital market has been identified as an institution that contributes to the socio-economic growth and development of emerging and developed countries economies. This is made possible through its vital role in intermediation process in economies. Osaze (2020) sees the capital market as the driver essential for the long-term growth capital formation. The Nigeria capital market provides the necessary lubricant that keeps turning this wheel of the economy. It is not only providing the funds to projects of best returns to fund owners. This allocation function is critical in determining the overall growth of the economy. Ekundayo (2019) argues that a nation requires a lot of local and foreign investments to attain sustainable economic growth and development. The capital market provides a

means through which this is made possible. Pedro and Erwan (2020) asserts that financial market development raises output by increasing the capital used in production and by ensuring that capital is put into best uses.

Economic Growth

Economic growth has long been seen as a significant economic policy priority, with a wide body of research dedicated to understanding how to achieve this goal (Fadare, 2018). Academics have paid a great deal of attention to economic growth. Khorravi and Karimi (2017) estimate in their classical studies that economic growth is mainly related to labour and capital as development factors. The emergence of an endogenous theory of growth has prompted specialists to question the role of other factors in explaining the economic growth phenomenon (Bogdanov, 2018). The expansion of the future GDP or output of the country is economic growth. For instance, if the social rate of return on investment exceeds the private rate of return, then the rate of growth and the level of utility will be improved by tax policies that encourage investment. For growth models incorporating public services, the optimal tax strategy depends on the characteristics of services (Olopade&Olopade, 2019). Economic growth has provided insight into why economies are growing at various rates over time, and this has an impact on the government's choice of tax rates and expenditure levels that will influence growth rates.

Economic growth can also be defined as a rise in a nation's total production (goods or services). There is an increase in the economy's capacity to produce goods and services from one period of time to another (Abbas, 2015). Economic growth implies an increase over a long period of time in goods and services produced by an economy, typically a nation. It is measured as a percentage increase in the economy or nation produced in the actual gross domestic product (GDP). In the view of Boris (2012), economic growth is defined as a positive improvement over a period of time in a country's national income or the amount of production of goods and services. As a measure of gross domestic product, Joshua (2015) has conceptualised economic growth. This means that the gross domestic product summarizes the economy 's output. Economic growth has been defined by Fair and Oster (2019) as a rapid increase in production and productivity, agricultural growth and manufactured exports, supported by higher domestic savings rates and physical and human capital expansion. It is also known as an annual increase in the total output of goods and services by the country, which can be achieved through macroeconomic stability, foreign capital, growth in exports and market penetration.

Empirical Reviews

Adamu and Sanni (2015), examined the roles of the stock market on Nigeria's economic growth, using Granger-causality test and regression analysis. They discovered a one-way causality between GDP growth and market turnover. They also observed a positive and significant relationship between GDP growth and market turnover ratios. The authors advised that government should encourage the development of capital market since it has a positive effect on economic growth. Ofurum, Ogunyemi, Madumere and Okolo (2019) examined the existence of long-run association between capital market components and economic growth in Nigeria between 1981 and 2017. Data were sourced from Central Bank of Nigeria Statistical Bulletin. GDP was used as proxy for economic growth while government securities (GS), corporate bond/preference shares (CBPS), and equities (EQT) were proxies for capital market components. The study also established the direction of causal relation between the variables. A Cointegrating regression approach was adopted for analysis. Other econometric tests such as stationarity test, Johansen test of cointegration and Granger causality test were also conducted. In the cointegration model, we placed GDP as the endogenous variable while capital market components served as the exogenous variables. The stationarity test shows that GDP, GS and CBPS were stationary at second order while EQT was stationary at first order, hence its removal from the cointegration test. Johansen test indicates three cointegrating equations using unrestricted cointegration rank test (Trace). The findings from canonical cointegrating regression technique further confirm the existence of a long-run relationship between GDP, GS and CBPS. More so, on the direction of causal relation, we found no homogeneity among the variables. GDP has a unilateral causal relationship with GS and EQT which flows GDP; while CBPS and GDB has a bilateral causal relationship.

Adoms, Yua, Okaro, and Ogbonna (2020) study is undertaken with the objective of examining the relationship between capital market and economic development in emerging African economies. The study adopted an ex-post facto research design for Nigeria, South Africa and Kenya and the variables used were Human Development Index (HDI) as the dependent variable, Stock Market Capitalization (SMC); Value of Stock Traded (VST); Stock Market Turnover Ratio (TR) as independent variable. Moreover, the period under study was from 1990 to 2018 and the data collected within the period were analysed using descriptive statistics, ARDL regression, granger causality and Ordinary Least Square (OLS) for the comparative single country regression analysis. The study empirically

provesthat capital market has a significant relationship with economic developmentin the selected emerging Africa economies in Nigeria and South Africa exceptfor Kenya which conforms with the Finance Led Growth Hypothesis Theory. AkpanandOkon (2019) examined the causal relationship between stock market performance and economic growth in Nigeria for the period 1987 -2014, using annual secondary data. Economic growth is proxied by gross domestic product (GDP) while capital market performance is measured by market capitalization, total new issues, volume of transaction and listed equities. The objective is to empirically analyze, using link between capital market performance and economic growth (i.e. whether stock market performance causes economic growth or itself is a consequence of increased economic activity). The investigation of the causal relationship was conducted using Granger causality test based on the Vector Autoregressive (VAR) model. The statistical techniques used include the unit root Augmented Dickey Fuller test in order to test for stationarity for all the time series in their levels and first differences. The Johansen co-integration test was used to investigate whether the variables are cointegrated of the same order taking into account the trace statistics and the maximum eigen-value tests. The variables were found to be cointegrated with at least one co-integrating vector. The findings imply that the causality between economic growth and capital market runs unilaterally from the capital market performance indicators to the GDP. From the results, it was inferred that the movement of stock prices in the Nigeria Stock Exchange reflect the macroeconomic conditions of the country and can therefore be used to predict the future path of economic growth. The study shows that the capital market performance has positively and significantly impacted on the Nigerian economy within the period of the study (1987- 2014).

Agu (2018) appraised the responsiveness of economicgrowth to capital market development in Nigeria.Specifically, the study sought to, (i) determine the impact ofmarket capitalization on Real Gross Domestic Product(RGDP) (ii) ascertain the effects of value of shares traded inthe capital market on Real GDP and (iii) find out whetherthe total number of issues in the capital market impact onRGDP in Nigeria. The researchers adopted time series datafrom 1995--2016 which were drawn from Central Bank ofNigeria Statistical bulletin and stock exchange reviewreports. The analysis of data was done using descriptivestatistics and ordinary least square (OLS) regressionTechnique. The result of the study shows that marketcapitalization was found to have negative relationship withReal Gross Domestic Product (GDP) in Nigeria. The studyalso reveals that there is limited contribution of the capitalmarket to the development of industrial sector. Ubesie, Nwanekpe and Ejilibe (2020) examined the impact of capital market on economic growth in Nigeria, with the aim to access the impact and determinant of capital market on the economic growth in Nigeria between 1980 and 2018. It further employed the ordinary least square method (OLS) in analysing the time series variables obtained for the study. The result of the findings show that all the variables of interest were significant in explaining the behaviour of capital market on the growth of Nigeria Economy except Labour force. more so, the result show that the model employed for the analysis is adequate and best in fitting the variables obtained.

Theoretical Review

Efficient Market Hypothesis (EMH)

The efficient market hypothesis suggests that a market is efficient when it is able to adjust quickly to take account of all available information, such that no single participant in the market gets more information than the information that is already reflected in the market prices. Consequently, the efficient market hypothesis discusses three main dimensions involved in capital market efficiency depending on the set of information available: weak- form market efficiency, Semi-strong market efficiency and Strong market efficiency (Omuchesie, 2014). Weak-form market efficiency exists when current prices fully reflect all historical price information, such that prices automatically adjust to information changes without lags. With semi-strong form efficiency, market prices reflect available public information including company reports, annual earnings, stock splits and company public profits forecasts. The strong form of efficiency, however, exist when prices reflect both public and private information about earnings, book values, investment opportunities.

Endogenous Growth Theory

Due to the fact that Solow's theory could not give details on all models of economic growth, new theories were developed. One of these is the new theory of growth, also known as endogenous growth theory, developed by Paul Romer. Romer's (1990) key line of reasoning is that technological alteration is not "a manna from heaven" and its trends and degree can be directed. If this is the case, technology can then be made endogenous to growth, rather than being an exogenous factor as in Solow's model. In addition to this, human capital and investments in innovations can then be perceived to be vital in the process. The new growth theory views knowledge as a public good (Romer,

2012). In general, the new growth theory exists in complete difference to the law of diminishing returns, due to the fact that the law of diminishing returns implies that output reduces if we increase the inputs. However, over the last 100 years, output in developed countries has increased and the new growth theory attributes this to an overflow of knowledge and innovations.

METHODOLOGY

Expost-facto research design was employed for this study. Anexpost-factoresearch design is very appropriate for this study because it describes the statistical association between two or more variables. The use of this design will allow for the testing of expected relationships between capital market components and economic growth; and the making of predictions regarding these relationships. Determining cause–effect relationships among the selected variables are the major aim of this study; hence, the data are of secondary nature which was collated from National Bureau of Statistics and the Central Bank of Nigeria (CBN) statistical bulletins for 34 years, covering the period 1986-2020. It is the aim of the researcher to derive the impact ofcapital market components on economic growthin Nigeria. To achieve this, the researcher estimates the linear regression equation as:

$$GDP = \alpha_0 + \alpha_1 GS + \alpha_2 CB + \alpha_3 EQU + e_t \text{ --- (1)}$$

Where;

| | | |
|--------------------------|---|---|
| α_0 | = | the autonomous parameter estimate (Intercept or constant) |
| GS | = | Government securities |
| CB | = | Corporate Bonds |
| EQU | = | Equities |
| GDP | = | Gross Domestic Product |
| α_1 to α_3 | = | Parameter coefficients |
| e_t | = | Error term |

Equation (1) is the baseline long run model for determining the impact ofcapital market components on economic growth in Nigeria. It has been vastly emphasized in recent literature of financial econometrics that upon the establishment of a long-run relationship, there is need to integrate a model which fits in with short-run dynamic adjustment process, which is the speed of adjustment (ECT) from short-run disequilibrium to long-run equilibrium. Based on this, the researcher develops ECM by modifying equation (1) as follows:

$$GDP = \alpha_0 + \sum_{j=0}^n \alpha_{1j} \Delta GDP_{t-j} + \sum_{j=0}^n \alpha_{2j} \Delta GS_{t-j} + \sum_{k=0}^o \alpha_{3k} \Delta CB_{t-k} + \sum_{k=0}^o \alpha_{4k} \Delta EQU_{t-k} + ect_{t-1} + \varepsilon_t \text{ --- (2)}$$

The paper conducted unit root tests (pre-estimation diagnostics tests) to ascertain the stationarity of the data before carrying out the cointegration test. Dickey and Fuller (1979), have also stressed the importance of investigating time series data whether they exhibit random walks that needed to be white-noised before using them for estimation purposes. Failure to do this, according to them could result to spurious regression analysis that would not permit us to obtain a robust estimate of the parameters. After conducting the stationarity test on the times series, it is imperative to ascertain if they have long-run relationship among themselves. The annualized time series data was thus analyzed using the Autoregressive Distributed Lag (ARDL) and Error Correction Model (ECM). In other words, the underlying assumption is that all variables are integrated of order one or mixed. The speed of adjustment was ascertained based on the ECM and was able to tell the rate at which the previous period disequilibrium is adjusted toward equilibrium path on an annual basis.

RESULTS AND DISCUSSION

Test of Stationarity

Unit root test are performed majorly to avoid spurious results, because of possible stationarity properties of variables. Unit root test (or Stationarity) test was conducted on each of the variables using the Augmented Dickey fuller (ADF) test. The result of unit root test is presented in Table 1

Table 1.1: Unit Root Test Results

| Variable | ADF Test Statistics | | | | |
|----------|---------------------|----------------|------------------|----------------|----------------------|
| | Levels | Critical Value | First Difference | Critical Value | Order of Integration |
| GDP | -2.124120 | -3.552973 | -4.965279* | -4.296729 | I(1) |
| GS | -2.092293 | -3.552973 | -4.562280* | -4.273277 | I(1) |
| CB | -2.855011 | -3.552973 | -5.446107* | -4.273277 | I(1) |
| EQU | -3.390392 | -3.209642*** | -5.289009 | -3.568379 | I(0) |

Note: The tests include intercept with trend; * and ***implies significant at 1% and 10%

Source: Authors Computation, 2021 (Eviews-10)

From Table 1, it could be observed that only EQU was found to be stationary at levels, that is, it was found to be integrated at order zero $\{I(0)\}$ and at 10% levels of significance. However, GDP, GS and CB were all found to be stationary at first difference; that is integrated at order one and at 1% level of significance. At this order of integration, their ADF test statistics, -4.586079, -4.562280, and -5.446107 were greater than the critical test statistics of -4.965279, -4.273277, and -4.273277 at 1% significant level respectively. Since all the variables were found to be stationary at different orders, it was safe for the study to employ ARDL bound test approach to validate or test for the presence of Co-integration.

Co-integration Test

Having established the order of integration, the next task is to establish long run relationship among the variables. Two variables are said to be co-integrated if they have a long-term, or long run equilibrium, relationship between them. If two variables, dependent (independent) are individually non-stationary but their residual (combination) is stationary, those variables are co-integrated on the long run. The result of the co-integration test is presented.

Table 1.2: Result of ARDL Bounds Test for Co-integration

| F-Bounds Test | | Null Hypothesis: No levels relationship | | |
|----------------|---------|---|------|------|
| Test Statistic | Value | Significance | I(0) | I(1) |
| F-statistic | 4.96522 | 10% | 2.63 | 3.35 |
| K | 3 | 5% | 3.1 | 3.87 |
| | | 1% | 4.13 | 4.96 |

Source: Author's computations (2021), using Eviews-10

The co-integration test result shows that the F-statistic value of 4.96522 is greater than the lower (I(0)) and upper bound (I(1)) critical value at the 5% significance level. Thus, the null hypothesis of no long-run relationship is rejected at the 5% significance level. It can therefore be inferred that the variables are co-integrated. Thus, there is a long-run co-integrating relationship between capital market components and economic growth in Nigeria.

Table 1.3: ARDL Error Correction Regression Result

| ECM Regression Case 2: Restricted Constant and No Trend | | | | |
|--|-------------|------------|-------------|--------|
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| D(GDP) | 0.032451 | 0.010058 | 3.226376 | 0.0321 |
| D(GDP(-1)) | -0.085780 | 0.011053 | -7.760516 | 0.0015 |
| D(GDP(-2)) | -0.025836 | 0.007530 | -3.430864 | 0.0265 |
| D(GS) | -0.150805 | 0.067157 | -2.245557 | 0.0356 |
| D(GS(-1)) | 0.255513 | 0.055007 | 4.645133 | 0.0001 |

| | | | | |
|--------------------|-----------|-----------------------|-----------|--------|
| D(CB) | 0.145663 | 0.060314 | 2.415058 | 0.0249 |
| D(CB(-1)) | -0.040253 | 0.065441 | -0.615102 | 0.5451 |
| D(EQU) | -0.169550 | 0.139602 | -1.214526 | 0.2380 |
| D(EQU(-2)) | -0.188852 | 0.118375 | -1.595372 | 0.1256 |
| ect(-1)* | -0.285145 | 0.057086 | -4.698002 | 0.0001 |
| | | | | |
| R-squared | 0.741152 | Mean dependent var | -0.357720 | |
| Adjusted R-squared | 0.583093 | S.D. dependent var | 1.495202 | |
| S.E. of regression | 0.965427 | Akaike info criterion | 2.963187 | |
| Sum squared resid | 22.36919 | Schwarz criterion | 3.286991 | |
| Log likelihood | -38.92940 | Hannan-Quinn criter. | 3.068739 | |
| Durbin-Watson stat | 1.745501 | | | |

Source: Authors Computation, 2021 (Eviews-10)

As expected, the lagged error correction term (ECT) is negative, less than unity and statistically significant at 5%. The ECT coefficient value of -0.2851 revealed that once there is disequilibrium in the system, it takes an average (annual) speed of 28.51percent to restore a long-run relationship between the capital market components and economic growth in Nigeria. The implication of this is that, once there is disequilibrium in the system, it takes an average speed of 28.51% to adjust itself back towards long-run equilibrium level as captured in Table 3. The coefficient of determination (R-square), which was used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction. It showed that 74.11 percent changes in GDPwere collectively due to GS, CB and EQU while 25.89 percent unaccounted variations were captured by the error term. Durbin Watson (DW) statistic was used to test for the presence of serial correlation or autocorrelation among the error terms. The acceptable Durbin - Watson range is between 1.5 and 2.40. The model also indicates that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.7455. This shows that the estimates are unbiased and can be relied upon for managerial decisions.

Statistical Test of Hypotheses

The three hypotheses formulated in this paper were approached with the aid of t-value; while the level of significance for the study is 5% for the two-tailed test. The decision rule for accepting or rejecting the null hypothesis is that the hypothesis must be based on the Probability Value (PV). If the PV is less than 5% or 0.05 (that is, $PV < 0.05$), it implies that the variable in question is statistically significant at 5% level; otherwise, it is not significant at that level.

Test of Hypotheses One

H₀₁: Government securities has no significant impact on economic growth in Nigeria

Table 4: Results of Wald Test on Government securities and economic growth

| Test Statistic | F-Value | df | Probability |
|----------------|----------|--------|-------------|
| F-statistic | 4.524101 | (2, 4) | 0.0033 |
| Chi-square | 6.524122 | 3 | 0.0001 |

Source: Authors Computation, 2021 (Eviews-10)

The Wald-test in Table 4 indicated that the calculated F-value for government securities is 4.524101 and its probability value is 0.0033. Since the probability value is less than 0.05 at 5percent level of significance, it thus falls in the rejection region and hence, the first null hypothesis (**H₀₁**) was rejected. The result thus shows that Government securities hasa significant impact on economic growth in Nigeria.

Test of Hypotheses Two

H₀₂: Corporate bond has no significant impact on exchange ratesin Nigeria

Table 5: Results of Wald Test on Corporate bond and economic growth

| Test Statistic | F-Value | df | Probability |
|----------------|----------|--------|-------------|
| F-statistic | 6.825189 | (2, 4) | 0.0258 |
| Chi-square | 7.650377 | 3 | 0.0012 |

Source: Authors Computation, 2021 (Eviews-10)

The Wald-test in Table 5 indicated that the calculated F-value for corporate bond was found to be 6.825189 and its probability value is 0.0258. Since the probability value is less than 0.05 or 5percent level of significance, and fell in the rejection region, the study rejects the second null hypothesis (H_{02}) and conclude that corporate bond has a significant impact on exchange rates in Nigeria

4.3.3 Test of Hypotheses Three

H₀₃: Equities has no significant impact on economic growth in Nigeria

Table 6: Results of Wald Test on Equities and Economic growth

| Test Statistic | Value | df | Probability |
|----------------|----------|--------|-------------|
| F-statistic | 6.732348 | (3, 4) | 0.0281 |
| Chi-square | 7.197045 | 3 | 0.0519 |

Source: Researchers Computation, 2021 (E-views 10)

The Wald-test in Table 6, the indicated that the F-value for the relationship between equities and economic growth in Nigeria was found to be 6.732348 with an associated probability value of 0.0281. Since the probability value is less than 0.05 or 5percent level of significance, the third null hypothesis (H_{03}) was rejected. The study thus concludes that Equities has a significant impact on economic growth in Nigeria.

Robustness Test Results

The paper conducted various series of post-estimation diagnostic tests to ascertain the robustness of the results. Tests such as the serial correlation Lagragian Multiplier test (for higher order autocorrelation), the heteroscedasticity test, and normality test. The decision rule for accepting the null hypothesis for any of these diagnostics tests is that the probability-value (p-value) of each has to be greater than 0.05 or 5% level of significance.

Table 7 thus presents the Residual Test Results;

Table 7: Robustness (Test) Results

| Tests | | Outcomes | |
|---|-------------|-------------|-------------|
| | | Coefficient | Probability |
| Breusch-Godfrey-Serial-Correlation Test | F-stat. | 1.432407 | 0.4306 |
| Heteroscedasticity-ARCH Test | F-stat. | 0.671100 | 0.7724 |
| Normality Test | Jarque-Bera | 1.499555 | 0.4724 |

Source: Authors Computation, 2021 (Eviews-10)

The ARDL model result as presented in Table 7 revealed that there were no evidences of serial correlation and heteroskedasticity in the estimated first differenced ARDL model as the p-values of both (0.4306 and 0.7724) were found to be greater than 0.05 or 5percent. Furthermore, Jarque-bera test for normal distribution revealed that the result attained a normal distribution with a bell-shaped symmetrical distribution at 5percent significance level. This was captured by the Jarque-bera probability value of 0.4724 and found to be greater than 0.05.

Discussion of Findings

Findings from the study showed that government securities have a significant impact on economic growth in Nigeria. The implication of this findings is that huge government bonds floated has contributed positively and significantly to the volume of goods and services traded within the economy and as such enhanced economic growth. The is in agreement with the findings of Akpan and Okon (2019) whose study revealed that the movement of stock prices in the Nigeria Stock Exchange reflect the macroeconomic conditions of the country and can therefore be used to predict the future path of economic growth. Their study showed that the capital market performance has positively and significantly impacted on the Nigerian economy within the period of the study. In addition, the study

showed that corporate bond has a significant impact on economic growth in Nigeria. This indicates that the volume of transaction is an important factor in determining the magnitude of trading of shares in the capital market and it goes a long way in improving the performance of the market and as well increases the efficiency of the market which invariably improves the economic growth of Nigeria. This is in agreement with Adoms, Yua, Okaro, and Ogbonna (2020) whose study empirically proved that capital market has a significant relationship with economic development in the selected emerging Africa economies in Nigeria. Above all, findings from the study showed that equities have a significant impact on economic growth in Nigeria. The implication of this is that as new issues are raised and floated in the market, this in turn increases the number of shares traded and economic growth equally expands as well as impacting on the GDP.

CONCLUSION AND RECOMMENDATIONS

This study discussed the existence of long-run association between capital market components and economic growth. The study tested the relationship between capital market components (such as government securities, corporate bonds and equities) and gross domestic product. Based on the findings in this research, capital market (if properly managed) will promote and boost the quest for inclusive economic growth in Nigeria; as evidenced by the significant impact of government securities, corporate bonds and equities on economic growth in Nigeria. Based on these outcomes, the following recommendations are put forward:

- i. Government should increase the amount of securities they issue in the market as its increase has positively and significantly improve the overall economic growth of the country. The government and stakeholders are encouraged to leverage on the capital market through the sale of government securities for sustainable economic growth.
- ii. The volume of corporate bond transaction needs to be boosted by NSE through the introduction of more derivatives, convertibles, futures and options in the markets in order to be internationally competitive. The Nigerian financial and monetary authorities should ensure free flow of information in the market. This is necessary in order to attract more investors and increase new issues which will in turn increase the quantum of market capitalization that will result in improving the performance of the Nigerian capital market
- iii. The total listed equity in the NSE is still very low compared to other stock markets like those of South Africa and Egypt. Therefore, to increase the number of listed companies there is need to ensure stable macroeconomic environment, to encourage foreign multinational companies or their subsidiaries to be listed on the Nigerian stock exchange and also to improve the trading system in order to increase the ease with which investors can purchase and sell shares.

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Foreign Direct Investment and Capital Market Development: The Moderating Impact of Inflation

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Abstract

The study examines the moderating impact of inflation on the relationship between foreign direct investment (FDI) and capital market development in Nigeria from 1985 to 2019. Ex-post facto research design was adopted by the study while Ordinary least square was used to determine the relationship between the variables. The study found that foreign direct investment has positive significant impact on market capitalization while moderated foreign direct investment has positive but insignificant impact on market capitalization. From the findings, the study concludes that foreign direct investment is a significant factor that affected Nigeria capital market but if foreign direct investment is moderated, it has insignificant impact on Nigeria capital market. Based on this, the study recommends that the interactive effects explain that FDI has a positive impact on MC and the inflation rate insignificantly influences the MC. Therefore, if at least a positive market capitalization is to be maintained, the rate of inflation should at least be at the threshold level if not, there will be an insignificant market capitalization. With the relevance of inflation in this study, the government should be very proactive in enacting policies to ensure moderate inflation rate that would draw foreign investors and pin down the already established ones.

Keywords: Foreign Direct Investment, Capital Market Development, Inflation Rate

INTRODUCTION

One of the key macroeconomic policies for most of developing and emerging economies is to achieve sustainable economic growth. The craving for capital by developing countries as complement to domestic savings for growth and development has existed for many decades. Growing unemployment across the world, particularly in developing nations, demands measures that can help create jobs and improve the economy. The success of a country's stock market, among other things, is a significant component in determining the country's overall economic and financial health. As a result, stock market performance provides an overall indicator of the value of shares over a given time period (Onyinyechi & Ekwe, 2017). This means that stock market plays a critical role in any country's financial development (Ali, 2014). The stock market is also responsible for the structure that channels long-term fund to deficit units in the economy. The underdeveloped nature of the Nigerian economy has essentially hindered the pace of her economic growth and this has necessitated the demand for capital from overseas or foreign capital investment into the country, in order to supplement domestic capital. Nigeria as a developing country has adopted a number of measures aimed at accelerating growth and development in the domestic economy, one of which is to attract foreign direct investment. Irrespective of this, it is imperative to note that foreign direct investments and multinational investors are extremely sensitive to events in their host nations (more especially developing nations). The economic and political environments of developing nations are highly unstable (Waller-Hunter & Jones, 2002) due to lack of continuity in economic policies. This motivates investors to pull their investments and funds due to contrived economic policies (Yaqub, Adam & Jimoh, 2013). The intense instability of capital from developing countries lead to rising inflation, cost of capital and declining employment figures which

invariably render the host nation in an awkward position (Obadan&Obioma, 1999). The slow spate of development in the third world is usually traceable to inadequate resources to speed up economic growth and development. Saving in this part of the world is usually less than the investment needs. Most economies have resorted to foreign borrowings while others geared efforts toward attracting foreign contributions to stimulate development. Hence, the importance of foreign investment either by private or public agencies in promoting growth and development in developing countries cannot be overemphasized. Foreign investment is expected to serve as a means of complementing Nigeria's domestic resources in order to ensure development and improve the standard of living of the people (Olugbenga & Grace, 2015).

It is widely acknowledged that governments in emerging economies have not only focused their efforts in providing an enabling environment for businesses to thrive, but have also attempted to establish a business climate that is appealing to international investors. The formation of the Lagos Stock Exchange, which was registered on March 1, 1959, incorporated on December 15, 1960, and began operations on June 5, 1961, completed the achievement of the aforesaid goal. It was later renamed the Nigerian Stock Exchange in 1977 to pave way for performance of capital market activities. As a result, the capital market provides a platform for continuous attraction and operation of foreign capital for Nigeria's economics development. Despite the hoopla surrounding international public and private investments in Nigeria, the nation has not seen reasonable growth and development that can be traced back to its capital market. In fact, some analysts believe that the capital market's function as a legitimate avenue for foreign direct investment is yet to be completely appreciated (Olugbenga & Grace, 2015). The importance of foreign direct investment is very pertinent; hence its relevance cannot be overemphasized. The extent to which it matters in providing new technologies, products, management skills and competitive business environment, overtime has been a strong force for economic growth drive. However, the viability of foreign direct investment in host countries depends on some macroeconomic fundamental of which inflation play a major part.

Inflation no doubt plays an expedient role on influencing the level of FDI of an economy. Exploring inflation-growth relationship is of serious concern that has spurred considerable theoretical and empirical research dating back right from the onset of understanding the link as very important for effective monetary policies (Seleteng, Bittencourt & Van Eyden, 2013). Over the years as seen in previous studies, low inflation rate has been seen to draw foreign investors to prompt growth, and with this knowledge, the various governments have made fervent efforts to keep inflation rates attractive, that is, at a relatively low rate. Whether inflation is indispensable for growth or not it is the bone of contention. Even with the variations in theoretical and empirical literatures on inflation-growth relationship, there are abundant empirical studies that confirm the negative effects of high inflation on economic growth (Fisher, 1993; Khan & Sen Hadji, 2001). The fusion of a high growth rate and stable inflation – at a low rate – is the major goal of macroeconomic policies for every economy (Seleteng, Bittencourt, & Van Eyden, 2013; Vinayagathan, 2013) because inflation at high level halts economic growth courtesy of its unwanted redistributional and welfare effects (Eggoh & Muhammad, 2014). By fostering investment and enhancing the efficiency in the usage of productive resources, low inflation stimulates growth (Ahortor, Adenekan & Ohemeng, 2012). This calls for this question; at what level exactly does low inflation become high? With high inflation, uncertainty makes the economy more unpredictable, and the resulting effect is that sustainable growth becomes more difficult.

Despite burgeoning research on the importance of foreign direct investment (FDI) and stock market performance such as Azeez and Obalade (2019); Iriobe, Obamuyi and Abayomi (2018); Adigun, Sakariyahu and Lawal (2017); Musa and Ibrahim (2014), there is a lack of consensus about their relationship; importantly, the studies failed to document the role of inflation in affecting the relationship between the foreign direct investment and capital market development. The studies that acknowledge the moderating effect of inflation on the relationship between the foreign direct investment and capital market development are Kelvin and Ogbonna (2019); Vera (2020) however, Kelvin and Ogbonna (2019) runs

from 1981-2017 which requires a study that will extend the period to 2019 while Vera (2020) study was carried out in Kenya which findings cannot be applied in Nigeria. This therefore create gap in literatures which this study intends to bridge. The main objective of the study is to examine the moderating impact of inflation on the relationship between foreign direct investment and capital market development in Nigeria from 1985 to 2019 and the basic hypothesis underlying this study is stated thus:

Ho₁: Inflation has no moderating significant impact on the relationship between foreign direct investment and capital market development in Nigeria.

LITERATURE REVIEW

Foreign Direct Investment

Foreign direct investment is defined by Nkoro and Furo (2012) as consisting of the movement of financial resources from one country to another; not minding the direction which could be either ways. Foreign Direct Investment (FDI) involves the entry of foreign capital into a country with the goal of producing goods for both domestic and international consumption. It is a direct investment in a country by an individual or a corporation from another country, either through the purchase of a company in the target country or the expansion of an existing business in that country. (Adeleke, Olowe & Fasesin, 2014). Nwankwo, Ademola and Kehinde (2013) opined that FDI can be measure in terms of new of new equity capital inflows, re-invested earnings, trade and supplier's credit, net borrowings and other commitments from the parent company or its affiliates. According to OECD (1996), FDI is an investment made to acquire a long-term interest in businesses that operate outside of the investor's economy. An incorporated or unincorporated direct investment enterprise is one in which a single foreign investor holds 10% or more of the ordinary shares or voting power of the company (unless it can be proven that the 10 per cent ownership does not allow the investor an effective voice in the management) or holds less than 10% of an enterprise's ordinary shares or voting power but has a significant influence on management (Organisation for Economic Co-operation and Development; OECD, 1996). Foreign direct investment therefore emerges due to the elimination of hindrances across country borders and improved trade between countries (Adetula, Nwobu & Owolabi, 2014). Based on IMF (2004), Foreign Direct Investment also arises due to an investment in an organization's business by an investor from a foreign country. Hossein and Yazdan (2012) also saw FDI as the main channel for the growth in economy through technological transfer. FDI is considered as an essential avenue for direct technology distribution and a major channel for technological transfer consequent upon the dearth of fund in less advanced countries (Hossein & Yazdan, 2012).

Empirical Framework

Using data from 2007 to 2017, Iriobe, Obamuyi and Abayomi (2018) looked into the impact of foreign portfolio investment inflows on the performance of the Nigerian capital market. The autoregressive distributive lag model was used to analyze the influence of the dependent variable, stock market development, and the independent variable, foreign portfolio investment inflows in Nigeria, using an ex post facto research methodology. The study found that foreign portfolio direct investment inflows are a trigger for the Nigerian capital market's success. Azeez and Obalade (2019) Market capitalization was used as the dependent variable in the study, which also included gross domestic product, banking sector development, stock market liquidity, foreign capital inflow, inflation, and aggregate domestic savings levels in Nigeria. The model's long run equilibrium connection and short run dynamics were determined using the autoregressive distributive lag model. According to the findings, the long-term and short-term factors of stock market development include the banking sector's resilience, stock market liquidity, and foreign direct investment inflows. It also emerged that inflation and aggregate domestic savings were insignificant determinants of the stock market development in Nigeria.

Vera (2020) looks at how inflation affects the link between foreign direct investment, financial market development, and economic growth in Kenya. The study integrated a macroeconomic variable (inflation

rate) to moderate between the dependent and independent variable for a period of 36 years 1980 to 2016. Correlation research design utilized in the study with a target population of six variables; GDP per capita income, FDI inflows, inflation rate, market capitalization/GDP, stock traded/GDP and domestic credit/GDP over a period of 36 years. Data analysis carried out using SPSS implementing descriptive and inferential statistics; the study findings revealed that the linear financial market development and foreign direct investment have positive effect on economic growth in Kenya. However, the interaction term between financial development and inflation rate has a negative effect on economic growth. The marginal effect of FDI evaluated on inflation rate resulted to a positive interaction term. Kelvin and Ogbonna (2019) determined the impact of inflation on FDI-growth relationship for the period 1981-2017. In the results, there's a positive long-run relationship between the three variables in question. An addendum to the findings shows a nonlinear relationship, such that the Nigerian economy is at its highest growth rate when inflation is less than or equal to 2.80 percent threshold level of inflation and above which it becomes harmful to growth. Further findings show that the marginal effect of FDI at less than threshold level of inflation is positive to growth while at higher than threshold level of inflation is negative to growth. In conclusion, the Nigerian government should harness, develop and stabilize her macro economy to prevent the repulsion of foreign investors by maintaining its inflation at its threshold level or less.

Adigun, Sakariyahu and Lawal (2017) examined the impact of foreign direct investment on stock market development in the era of post structural adjustment programme in Nigeria. Secondary data spanning 1986 to 2016 was collated and estimated using the Autoregressive Distributive Lag model to establish the relationship between the variables of the study. The dependent variable is market capitalization, while foreign direct investment is the explanatory variables and inflation and foreign exchange rate were used as the control variables of the study. The results indicated that capital inflow has a long run equilibrium relationship with the development of the Nigeria capital market. However, it also found the lack of short run equilibrium causal relationship between foreign capital inflows and stock market development in Nigeria.

Eze and Timipere (2020) examined the impact of stock market development from 1985 to 2018 on the inflow of foreign direct investment into the Nigerian economy. The empirical results show that the market value and the value of foreign exchange transactions have a positive effect on the flow of foreign direct investment in Nigeria. However, other observations indicate that only market capitalization has a statistically significant impact on Nigeria's FDI inflows. Furthermore, it emerged that all share index is negative and has a statistically invalid impact on foreign direct investment inflows in Nigeria. The study concluded that market value and transaction value, which are a measure of the development of the stock market, stimulated the inflow of foreign direct investment into Nigeria. Musa and Ibrahim (2014) examined the effect of capital inflow, foreign exchange rate and inflation on stock market development in Nigeria. Time series data spanning 1981 to 2010 using the co-integration test to establish the existence of a long run relationship in the model and the error correct technique was also employed to determine the magnitude and direction of interaction amongst the variables of the study. The results indicate the existence of long-term equilibrium relationship in the model. The study also found that there is an insignificant linear between capital inflows and stock market development. The measures of price stability showed mixed results. Inflation rate exerted an insignificant positive relationship with the dependent variable, this was however, found to be nonlinear and statistically insignificant between foreign exchange rate and stock market development in Nigeria.

Eclectic Paradigm (O-L-I Theory)

Developed by Dunning in 1979, according to Dunning, the structure of an organization is not the only important factor, but there are three important factors that successfully promote the participation of foreign direct investment. The first factor is the company's ownership advantage in domestic and foreign markets. They reduce monopoly power (trademarks, patent rights, ownership of limited resources), capabilities (innovation, business skills and technology), R&D (product differentiation) and dimensional

advantages (economies of scale and scope, broad financial base). The second factor is location advantage; this is related to the geographical location of the organization. This is related to property advantages, which are manifested in political stability and economic advantages (start-up costs, production factor costs, market scale, and climate economy) through political advantages. Finally, the social advantage. The third factor is the advantage of internationalization, that is, the advantage of independent production compared with cooperation agreements such as joint ventures. Companies are more willing to use their core competencies and influence decisions such as partnerships. According to Dunning (1981), if a company owns property rights, it can grant a license, which is cheaper than other forms of internationalization. However, FDI is a capital-intensive activity, so if it has the advantages of ownership, location and internalization, it can be realized. The study places great emphasis on this theory because it can help companies assess the framework to follow when determining the benefits of seeking foreign direct investment (FDI).

METHODOLOGY

The study adopts ex-post facto research design. This design explains the moderating impact of inflation on the relationship between foreign capital flow and capital market development in Nigeria after the events have taken place from 1985 to 2019. Ordinary least square is used to determine the relationship between the variables. various diagnostic tests were also conducted. The model is explicitly expressed as:

$$MC_t = \alpha + \beta_1 FDI_t + \beta_2 INF_t + \beta_3 FDI_t * INF_t + \mu_t$$

Where;

MC = Market Capitalization

FDI = foreign direct investment

INF= Inflation

α = Constant term

μ = error term

t= time

β_1 - β_3 = Coefficient of the variables

Variable Measurement

| VARIABLE | MEASUREMENT |
|---------------------------|--|
| Market Capitalization | The annual amount of market capitalization in the capital market |
| Foreign direct investment | Amount of foreign investment in Nigeria |
| Inflation | Nigeria annual inflation rate |

RESULT AND DISCUSSION

Table 1: Descriptive Statistics

| | MC | FDI | INF | FDI_INF |
|-----------|----------|----------|----------|----------|
| Mean | 6221.907 | 3642.076 | 19.34767 | 44228.77 |
| Median | 764.9000 | 1245.717 | 12.21780 | 20821.53 |
| Maximum | 25890.22 | 20121.42 | 72.83550 | 229319.8 |
| Minimum | 6.600000 | 5.621800 | 5.388000 | 32.14095 |
| Std. Dev. | 8083.426 | 4640.257 | 17.91300 | 54257.99 |
| Skewness | 0.976828 | 1.571203 | 1.698688 | 1.554863 |
| Kurtosis | 2.527314 | 5.531743 | 4.528880 | 5.198837 |

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| | | | | |
|--------------|----------|----------|----------|----------|
| Jarque-Bera | 5.891960 | 23.74815 | 20.24114 | 21.15353 |
| Probability | 0.052551 | 0.000007 | 0.000040 | 0.000026 |
| Sum | 217766.8 | 127472.7 | 677.1685 | 1548007. |
| Sum Sq. Dev. | 2.22E+09 | 7.32E+08 | 10909.77 | 1.00E+11 |
| Observations | 35 | 35 | 35 | 35 |

Source: Generated from Eview, 2021

The result shows that capital market development has maximum ₦25890.22billion market capitalization while the minimum capitalization is ₦6.6 billion. On average, the Nigerian capital market had ₦6221.907billion market capitalization for the past 35 years. In the same way, foreign investment on an average is ₦3642.076 billion with maximum and minimum foreign direct investment of ₦ 20121.42 and ₦ 5.621800 billion. Furthermore, Nigeria over the past years had experience high inflation with its maximum of 72.83550 and minimum of 5.388000 while moderated foreign direct investment had maximum and minimum value of 229319.8 and 32.14095 respectively.

Unit Root Test

Table 2: Foreign Direct Investment

Null Hypothesis: D(FDI,2) has a unit root

Exogenous: Constant

Lag Length: 7 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -5.403895 | 0.0002 |
| Test critical values: 1% level | -3.724070 | |
| 5% level | -2.986225 | |
| 10% level | -2.632604 | |

Source: Generated from Eview, 2021

The stationarity of the data was tested using augmented dickey fuller (ADF) unit root test. The result shows that FDI is not stationary at level and first difference but becomes stationary at second difference with t-statistics of -5.403895 and P-value of 0.0002. At this point, the critical values at 1%, 5% and 10% are all greater than the t-statistics which indicates the presence of stationary at second difference.

Table 3: Market Capitalization

Null Hypothesis: D(MC) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -5.702378 | 0.0000 |
| Test critical values: 1% level | -3.646342 | |
| 5% level | -2.954021 | |
| 10% level | -2.615817 | |

*MacKinnon (1996) one-sided p-values. **Source: Generated from Eview, 2021**

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The MC is stationary at first difference with t-statistics of -5.702378 and P-value of 0.0000. At this point, the critical values at 1%, 5% and 10% are all greater than the t-statistics which indicates the presence of stationary.

Table 4: Inflation

Null Hypothesis: D(INF,2) has a unit root

Exogenous: Constant

Lag Length: 4 (Automatic - based on SIC, maxlag=8)

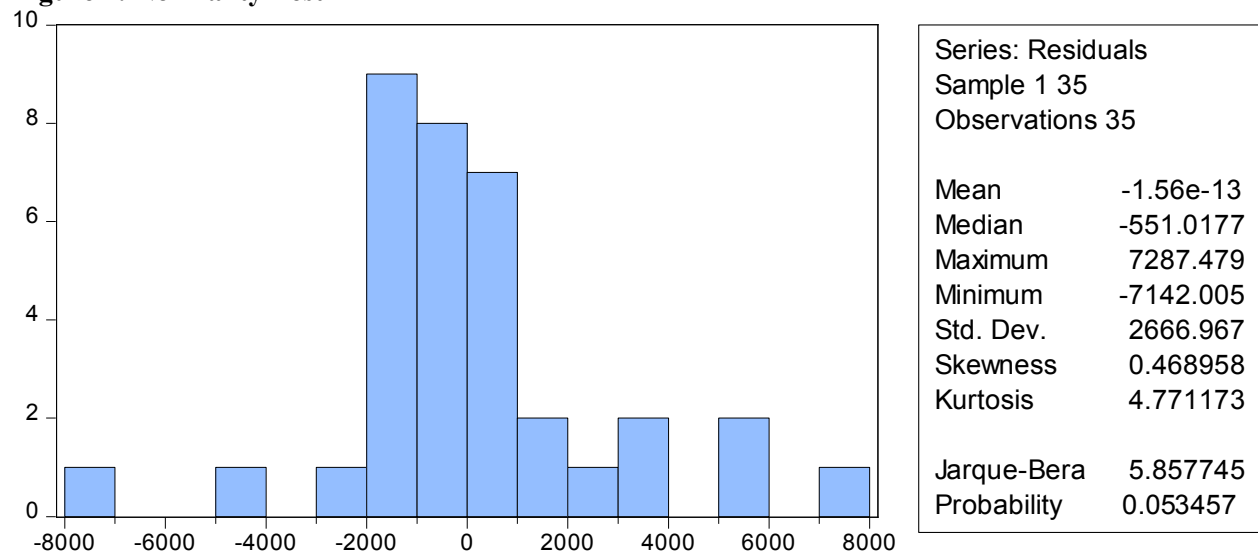
| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -6.284763 | 0.0000 |
| Test critical values: 1% level | -3.689194 | |
| 5% level | -2.971853 | |
| 10% level | -2.625121 | |

*MacKinnon (1996) one-sided p-values.

Source: Generated from Eview, 2021

The INF is stationary at first difference with t-statistics of -6.284763 and P-value of 0.0000. At this point, the critical values at 1%, 5% and 10% are all greater than the t-statistics which indicates the presence of stationary.

Figure 1: Normality Test



Source: Generated from Eview, 2021

The normality test of the variables was tested to ascertain its normality, from the probability of Jarque-Bera with p-value greater than 55 level of significance; it is evident that the residuals of the variables are normality distributed.

Table 5: Regression and Test Of Hypothesis

Dependent Variable: D(MC,2)

Method: Least Squares

Date: 05/29/21 Time: 14:05

Sample: 1 35

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Included observations: 33 after adjustment

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|--------|
| D(FDI,2) | 1.550025 | 0.407485 | 3.803884 | 0.0006 |
| D(INF,2) | -20.90397 | 30.57238 | -0.683753 | 0.4992 |
| D(FDI_INF,2) | 0.005947 | 0.033708 | 0.176424 | 0.8611 |
| C | 718.0187 | 921.0840 | 0.779537 | 0.4416 |
| R-squared | 0.891146 | Mean dependent var | 6221.907 | |
| Adjusted R-squared | 0.880612 | S.D. dependent var | 8083.426 | |
| S.E. of regression | 2793.034 | Akaike info criterion | 18.81486 | |
| Sum squared resid | 2.42E+08 | Schwarz criterion | 18.99261 | |
| Log likelihood | -325.2600 | Hannan-Quinn criter. | 18.87622 | |
| F-statistic | 84.59504 | Durbin-Watson stat | 1.241577 | |
| Prob(F-statistic) | 0.000000 | | | |

Source: Generated from Eview, 2021

It was gathered that foreign direct investment has positive significant impact on market capitalization with p-value less than 5% level of confidence. This shows that any increase in market capitalization by ₦1 will improved capital market by 1.550025 coefficient. Thus, foreign direct investment is an important factor that affect Nigeria capital market. The study is in line with Iriobe, Obamuyi and Abayomi (2018); Vera (2020); Kelvin and Ogbonna (2019); Adigun, Sakariyahu and Lawal (2017). However, inflation has negative insignificant impact on market capitalization. This shows inflation is not a significant factor that affect market capitalization. Furthermore, moderated foreign direct investment has positive insignificant impact on market capitalization. This signifies that inflation had not improve Nigeria capital market. The study is in line with Azeez and Obalade (2019). The model explains 89% variation on capital market development, while the remaining changes were explained by other variables not included in this study. In the same way, the model is fit because it is significant at a confidence level below 5%.

CONCLUSION AND RECOMMENDATIONS

The study examines the moderating impact of inflation on the relationship between foreign direct investment and capital market development in Nigeria. From the analysis, the study concludes that foreign direct investment is a significant factor that affected Nigeria capital market but if foreign direct investment is moderated, it has insignificant impact on Nigeria capital market. Based on this, the study recommends the following:

- That Nigerian government should ensure the stability of policies to ensure the attraction and retention of foreign capital.
- The interactive effects explain that FDI has a positive impact on MC and the inflation rate insignificantly influences the MC. Therefore, if at least a positive market capitalization is to be maintained, the rate of inflation should at least be at the threshold level if not, there will be an insignificant market capitalization. With the relevance of inflation in this study, the government should be very proactive in enacting policies to ensure moderate inflation rate that would drag foreign investors and pin down the already established ones.

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Effect of Cloud Accounting on the Financial Reporting Quality of SMEs in Nigeria

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Abstract

Cloud accounting is seen to lead to considerable increase in productivity because it helps accountants in small and medium business to provide quality financial reporting to their customers and arrangements on their money related issues and furthermore help accountants to exploit budgetary counsel and settle on better and fast choices, in this manner improving in general money related execution. In this study, the effect of cloud accounting on financial reporting qualities of SMEs was evaluated. This work discovered that there is need for SMEs to adopt cloud accounting technology in order to increase their financial reporting quality. The study hereby concludes that cloud accounting has a positive effect on financial reporting qualities of SMEs. The study recommends that the owners of SMEs in Nigeria should render their support on the adoption and smooth running of the cloud accounting by providing the necessary resources needed and also for computer technologist to solve the security issues that comes with cloud accounting technology.

Keywords: Cloud accounting, Financial reporting, Financial reporting qualities, SMEs

INTRODUCTION

The need for delivering quality financial report has gotten extraordinary consideration over the world. Giving top notch financial reporting data is significant in light of the fact that it will emphatically impact capital suppliers and different partners in making speculation, credit and comparative asset designation choices improving by and large market effectiveness (IFRS, 2018). For corporate data to advantageous, IASB contends that a key essential quality in financial reporting is the adherence to the target and the subjective attributes of financial reporting (Al-Dmour, Abbod, & Al Qadi, 2018). The essential target of financial reporting is to give top notch financial information concerning financial elements, fundamentally budgetary in nature, helpful for financial dynamic (IFRS, 2018). Giving top notch financial reporting information is significant in light of the fact that it will decidedly impact capital suppliers and different partners in making speculation, credit, and comparable asset allotment choices upgrading by and large market productivity (Ferdy, Geert and Suzanne, 2009). Nigeria, there is additionally arrangement of all around pitched instances of accounting scandal. The condition of financial reporting oversight gave by corporate review boards of trustees is a wellspring of worry to the Securities and Exchange Commission (SEC). The fiscal reports fill in as the essential apparatus for the executives to convey financial and operational information as the board responsibility and to address the issues of interior and outside gatherings who do not have the power to get the necessary information from the immediate wellsprings of the organization (Schipper and Vincent, 2003).

Accounting has advanced reliably over the previous decades, with each new expansion and development making it shockingly better and testing while at the same time giving fulfillment and accommodation to the clients. Current accounting has arrived at the current stage in the wake of experiencing slow changes throughout the years; by staying up with the quick developing innovative headways. There has been predictable adjustment and improvement from manual techniques to mechanical options which has made accounting simpler and helpful for clients. The ongoing movement in accounting towards quicker innovations has hugely expanded its ability to serve clients (Rao, Jyotsna and Sivani, 2018). Cloud Accounting is relied upon to make accounting effectively available, more affordable and efficient. Cloud Accounting includes utilization of cloud-based programming through any gadget having web association (Rao et al, 2018). The need for Small and medium scale undertakings (SMEs) to enter into this recent

trend in technology and receive appropriate developments that will assist with improving the nature of their finance report and furthermore assess factors influencing innovative selections is the main idea this paper solved

Financial reporting requires the arrangement of accounting related information by the administration to address the issues of different clients. The Financial Accounting Standards Board (FASB, 2006) indicated financial divulgence should make accessible actuality that remaining parts noteworthy for settling on normal choices by speculators, loan bosses and different clients (Moses, Ofurum and Egbe, 2016) It is normal that the financial reports ought to be a proper record of business exchanges that presents an across the board clarification of the situation in the short and since quite a while ago run of a firm to the individuals who utilize these fiscal reports (Igben, 1999). Lately, powerless inside control and fake exercises among others that are obvious inside organizations has prompted a temperamental accounting related detailing proclamation to its clients. Accounting information quality in Nigeria stays powerless contrasted with many propelled locales. This brought about hampering of the development of effective value markets. A typical grievance among speculators in Nigeria is that financial information on organization execution is either inaccessible or, whenever gave, needs dependability (Shehu, 2011). The Nigerian settings as far as accounting announcing characteristics, structure, and corporate administration are relied upon to appear as something else and better as far as headway and consistence (Shehu and Ahmad, 2013). These trending technologies are being used by large scale enterprises. This study seeks to investigate cloud accounting and financial reporting qualities of small and medium scale enterprises (SMEs) in Nigeria.

LITERATURE REVIEW

Cloud Computing

The dawn of the internet brought technological changes at a more rapid pace than previous, and businesses and consumers have witnessed these technological changes in the past two decades. As early risers, relatively young companies such as Google, Amazon and Facebook have considered taking such technologies deeply within their business models (Strauss, Kristandl& Quinn, 2015). In today's competitive marketplace, customer experience is fundamental, and cloud computing is a proven mean to ensure a high level of service. 'Cloud' has remodeled the way that people and institutions collaborate, communicate, share and store information and the manner that they obtain Information Technology resources or services for their personal and professional use (Dimitriu&Matei, 2014). Cloud computing does not have a universal definition, thus it has been defined differently by many authors. According to The US National Institute of Standards and Technology (NIST), cloud computing is a model that enables ubiquitous, convenient, on demand network access to share pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction (Mell&Grance 2011). In 2008, Buyya et al. defined cloud computing as 'a type of parallel and distributed system consisting of a collection of interconnected and virtualized computers that are dynamically provisioned and presented as one or more unified computing resources based on service level agreements' (cited in Dimitriu&Matei, 2014).

Cloud Accounting

For decades, financial accounting has been considered an official and a common source of information within organizations. According to the underlying accounting standards and rules, financial accounting provides a representation of the financial position of any given company (Chapellier, 1994). Thus, it can be called as the language of business as it guides the decision making process of stakeholders (Mohammadi&Mohammadi, 2014). Also, it serves for other multiple purposes as well, such as; business valuation, financial analysis and planning and controlling (Ionescu et al. 2014). Unfortunately, traditional accounting systems often do not support businesses properly due to reasons such as systems are too large and complex to comprehend in entirety, inability to reflect the changes that happen at the economy and

tax laws, not administering the information provided and inefficiency of traditional systems (Christauskas&Miseviciene, 2012). As there exists a turbulent business world, accountants should always exploit emerging technologies to fulfil their tasks more efficiently and accurately. One of the emerging technologies which have been identified by the Association of Chartered Certified Accountants is cloud technology (Chua, 2013). An official definition of cloud accounting has not yet established but certain authors have described it merging cloud computing and accounting principles. "Cloud accounting or online accounting" acts like accounting applications installed on users' computers, but it is performed on servers offering online services and users can access them through web browsers". Cloud accounting can be called as an extension of cloud computing, as cloud accounting paradigm is a combination of cloud computing principles and accounting practices. Studies prove that cloud accounting is gaining momentum in recent days but this has not gained the attention of local researchers.

Quality Financial reporting

Previous literature emphasizes that the accurate and qualified financial report is considered an effective tool for conducting financial analysis, feasibility analysis and interpretation. For example, Kaliski (2001) clarifies that the good financial report stresses on financial elements and exchanged relations among them, so that the user can easily conduct comparisons among them and then make appropriate decisions. It also highlights at the company past and current financial performance, so that the user can make predictions about the needed future financial performance of the company. Many studies have been conducted to study and examine the extent of financial reporting quality, its dimensions and the effecting variables (Botosan, 2004; Daske and Gebhardt, 2006). Other studies such as Biddle et al. (2009), Jennifer Martinez-Ferrero, 2014 focus on studying the effect and exchanged relationships between the quality of financial reporting and other affecting variables such as fraud, profit manipulation, earnings, internal audit and control and corporate governance. Financial reporting is a process of reporting financial activities of business on a formal way. It has been considered as an essential resource for any market participant. It also reduces the mystery and the conflict in opinion between all interested users such as managers, investors, regulatory agencies, society and other stakeholders. Every one participates in this process, even each operation related to this process should be submitted carefully, especially the disclosure process, all transactions, the accounting policies and all judgments and opinions made by the staff involved in this process (Gaynor et al., 2016). Explaining variation in firm performance is the central focus of much of the strategy literature. A large part of literature and previous studies try to examine quality of financial reporting and its effects on the subsequent performance of a company.

IFRS for SMEs

The International Financial Reporting Standard for Small and Medium Sized Entities (IFRS for SMEs) should considerably ease the financial reporting burden for clients who do not have public accountability. Published by the International Accounting Standards Board, the IFRS for SMEs (the "Standard") is intended for use by businesses that publish general purpose financial statements, but do not have public accountability. We are actively encouraging the adoption of the Standard for eligible private businesses and family offices, since it is considerably less complex than full IFRSs. Critically, there are no size limits, however the following do not meet the criteria, and will continue to report under full IFRSs: Those with debt or equity instruments traded in a public market; Those in the process of issuing such instruments; or Banks, brokers, mutual funds and others holding assets in a fiduciary capacity as part of their primary business. Legislative and regulatory authorities and standard-setters in individual jurisdictions across the world will ultimately decide which clients are required or permitted to adopt the Standard for the purposes of statutory financial reporting. It has not yet been adopted as a statutory reporting framework in the member states of the European Union or the United States; however it is already widely applied elsewhere. Many of our international business corporation clients and family offices have already adopted the Standard, and we expect most to do so in due course. The Standard can be adopted immediately, and there are special rules for those making the transition from full IFRSs, or another set of generally accepted accounting principles. For example, the first-time adopter may elect not

to apply the sections on business combinations and share-based payments for transactions effected or granted before the date of transition. Similarly, a first-time adopter may elect to measure an item of property, plant or equipment, an investment property, or an intangible asset.

Empirical Review

Mugenyi (2018) explored on the reception of Cloud Computing Services by Commercial Banks in Uganda for Sustainable Development. The investigation found that business banks in Uganda are consistently expanding in number of branches, sizes and operational exercises over the most recent two decades. This augmentation has pulled in high operational costs identified with buy and upkeep of IT framework and in any event, requiring bigger spaces to oblige them, which is constantly joined by helpless information stockpiling and the board. Cloud computing proffer the best and most recent answer for check the issues distinguished in the business banks, as featured in this examination if and when embraced. Haslinda, Mohd and, Norhaiza (2017) researched on Cloud Computing Adoption in Organizations. The examination surved writing on distributed computing appropriation in associations to distinguish its compelling components and its operationalisation in earlier writing. The scientists arrange the variables that impact the distributed computing reception utilizing the three settings recommended by the Technology Organization-Environment (TOE) system, to be specific, innovation, association, and condition. The finding from the examination recommends that the impacts of these elements differ across studies and a large portion of the investigations have operationalised distributed computing appropriation utilizing aim to embrace distributed computing or double factor, as opposed to the real utilization of the innovation. Tahmina (2017) did a hypothetical audit of cloud bookkeeping. The examination shows that the development of bookkeeping programming utilizing the cloud innovation has improved the act of bookkeeping altogether, which is one of the enormous IT advancements in the course of the most recent decade. Like different divisions of business, bookkeeping has likewise grasped distributed computing arrangements so as to give important and specific data just as a constant review of business for all partners. Despite the fact that cloud bookkeeping is turning out to be increasingly more typical step by step, numerous entrepreneurs and experts are not exactly secure with what it is, the thing that its advantages are or how it will shape the future bookkeeping. The examination finished up by giving a hypothetical review of cloud bookkeeping covering its idea, benefits, weaknesses, correlation with the conventional one and some other significant angles that may shape the bookkeeping calling in the coming years.

Perri and Muça (2015) completed an investigation on the job of distributed computing in bookkeeping enterprises in Albania. The investigation sees distributed computing as an innovation dependent on the web which encourages the administration and conveyance of registering administrations through the system is by all accounts the perfect reaction that addresses issues of bookkeeping firms as far as gathering, putting away, handling and detailing data. The specialists feature the impacts of this innovation in bookkeeping data frameworks and monetary execution having in center organizations that work in Albania. The examination discover that despite the fact that the degree of data about distributed computing is impressive, the wellsprings of data are not as much from business foundation but instead from scholarly sources and individual investigations. Besides the examination found that the best advantages of distributed computing innovation are seen to be cost reserve funds both in equipment and programming, while data security and unwavering quality are referenced as its greatest downsides. Okoye and Akenbor (2014) examined the monetary detailing system in Nigeria and the appropriation of the worldwide money related announcing principles. In this investigation a hypothetical assessment of the structure of money related detailing in Nigeria opposite the appropriation of the International Financial Reporting Standards (IFRS) was introduced. The investigation did a broad survey of writing, uncovered the issues, advantages and difficulties in the progress from Generally Accepted Accounting Principles (GAAP) to IFRS. The examination toward the end suggested that corporate elements in Nigeria ought to adjust to the International Financial Reporting Standards instead of complete selection of the measures and to guarantee its maintainability; a nationwide serious limit building program is a "sine qua non".

Strauss, Kristandl and Quinn (2014) completed an examination on the impacts of cloud innovation on the executives bookkeeping and dynamic. The examination shows that administration bookkeeping and account frameworks are most drastically averse to be cloud-situated in inclination to different frameworks, regardless of a valuation for the upsides of cloud innovation when all is said in done. While the purposes behind this might be legitimate (information security), the feasible cost reserve funds and frameworks adaptability should be deliberately thought of. The executive accountants can assume a job in not just assessing expenses and advantages of cloud innovation, yet in addition in guaranteeing that the benefits of progressively cooperative business forms are imparted to supervisors and acknowledged by any usage of cloud innovation. Second, the board accountants are very much positioned to work with specialized specialists and additionally cloud specialist organizations to guarantee information security issues are appropriately tended to. The analysts anticipate that its utilization should develop after some time, and further examination on how the innovation will influence the arrangement of dynamic data and the job of the administration bookkeeper would be welcome and smart.

Al-zoubi (2017) examined on the Effect of Cloud Computing on Elements of Accounting Information System, The examination recognizes the effect of Cloud Computing on the Elements of the Accounting Information System spoke to by: Establishment "Bookkeeping Entity.", Financial Operations, Documents, Accounting Books, Financial Reporting, Users, Procedures, Software, and Physical Devices. The examination gathered past writing on distributed computing and data innovation and studies their effect on bookkeeping data frameworks. The examination discovered that Cloud Computing lead to Reducing the size of the venture as far as the structure and the workplaces since they permit property anyplace without the executives responsibility to a particular area, Improving operational execution as far as encouraging the finishing of activities and exact bookkeeping tasks, The cloud has become a spot for the fulfillment of tasks and exchange between representatives or clients with big business framework, Dispensing the reports to guarantee they are self-administration to clients, decrease the quantity of sales reps since it empowers clients to look at the set up items and offer deals arranges electronically from an assortment of topographical areas without the need to assign deals to go among customers lastly distributed computing gives a product as an assistance stage were people and firms can utilize programming and physical hardware without the need to purchase the product and introduce it on their PCs. Gupta and Gaur (2018) did an examination on the effects of distributed computing on bookkeeping. Distributed computing developed as the wellspring of change in the field of bookkeeping the same number of firms and people are driving towards the innovation for recording and understanding instead of depending on traditionalist techniques for bookkeeping. This examination endeavors to impact of distributed computing on bookkeeping in current situation. It likewise plots the advantages and difficulties looked by it and extension for its future development. This investigation utilized auxiliary information, to seriously apply individual information and thinking so as to drive ends. It was anyway seen that distributed computing is beating the time because of its cost viability and adaptability while hesitation on its adjustment is given due to its security issues and absence of help from partners. It is reasoned that human intercession is vital piece of distributed computing as dealing with cloud is finished by them, thus people who are doing bookkeeping utilizing ordinary strategies normally oppose the development of distributed computing because of their absence of enthusiasm for tolerating this change and they are not steady enough to learn new innovation.

Theoretical Framework

System theory

System theory expresses that organizations ought to be treated as an open framework that changes contributions to yields inside the conditions (outside and interior) whereupon they are reliant (Miller and Rice 1967). System theory is the premise of the info procedure yield result model of overseeing execution, which evaluates the whole commitment that an individual makes inside the framework in doing their assigned activities, not simply the yields. Data sources contain the skills and information that an individual brings to a vocation. Aptitudes and information are estimated to survey improvement and

adapting needs of workers. This theory will be adopted in this work because organization relies upon the globe for its data sources, yet for the acknowledgment of yields. Thusly, they should create implies for adapting to natural requests. Basically, there is no way a company will survive without its interaction with its internal and external environment especially when it comes to adopting new technologies like cloud accounting.

Theory of Reasoned Action

In 1980, Ajzen and Fishbein formulated the Theory of Reasoned Action. This resulted from attitude research using the Expectancy Value Models (Fishbein, 1968 cited in Shareef et al. 2009). They formulated the theory after trying to estimate the discrepancy between attitude and behavior. The fundamentals of the theory have come from the field of social psychology. Social psychologists attempt to explain how and why attitude affects behavior. That is, how and why people's beliefs change the way they act. Theory of Reasoned Action has three general constructs: (1) behavioral intention, (2) attitude, and (3) subjective norm. Ajzen and Fishbein (1980) proposed that a person's behavior is determined by the person's intention to perform the behavior and that this intention is, in turn, a function of the person's attitude toward the behavior. One of the potential reflectors of possible behavioral outcome is intention (Shareef et al. 2009).

Innovation Diffusion Theory

Innovation Diffusion Theory's primary intention is to provide an account of the manner in which any technological innovation moves from the stage of invention to widespread use (or not). Though not concerned with information technology exclusively, diffusion theory offers a conceptual framework for discussing acceptance at a global level. Diffusion theory speculates five characteristics of innovations that affect their diffusion: relative advantage (the extent to which a technology offers improvements over currently available tools), compatibility (its consistency with social practices and norms among its users), complexity (its ease of use or learning), trialability (the opportunity to try an innovation before committing to use it), and observability (the extent to which the technology's outputs and its gains are clear to see). Each of these characteristics on its own is insufficient to predict either the extent or the rate of diffusion, but studies have demonstrated that innovations giving advantages like compatibility with existing practices and beliefs, low complexity, potential trialability, and observability, will be more extensively and rapidly diffused than an innovation with the cluster of opposite characteristics (Dillon & Morris, 1996). Innovation diffusion theory suggests that factors at the level of the individual user are also important. Early studies have divided technology or innovation adopters into five categories depending on their speed of uptake: innovators, early adopters, early majority, late majority, and laggards (cited in Dillon & Morris, 1996).

METHODOLOGY

This study was carried out to evaluate cloud accounting and financial reporting qualities of SMEs in Nigeria. The study made use of a singular source of data. Secondary sources of data generation were employed through the use of financial reports, published journals, articles and gazette. The data was examined by reviewing various data from related areas to the study and all variable in the study was reviewed. The population of the study consists of over 50 million registered SMEs with small and Medium Enterprise Development Agency of Nigeria (SMEDAN), Purposive sampling technique was used to select SMEs that are cloud accounting compliant over a period of 5 years.

Model Specification

$$QFR = \alpha_0 + \beta_1 CDA_{it} + \beta_2 AS_{it} \dots \dots \dots (1)$$

Where;

QFR= Quality Financial Report

CDA= Cloud Accounting

AS= Accounting Software

α_0 =Constant or intercept

RESULTS AND DISCURSIONS

Table 1 Descriptive Statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|----------|------|---------|-----------|--------|-------|
| QFR | 1000 | 6.9338 | 10.7353 | -44.16 | 42.85 |
| CDA | 1000 | 0.15261 | 0.13632 | -0.24 | 0.83 |
| AS | 1000 | 0.49657 | 0.28966 | 0.1 | 2.57 |

Source:Stata 13 Output Results based on study data

Table 1 showed the summary descriptive statistics of all the variables used in the study Overall, The average ratio of cloud Accounting (CDA) was relatively low at 15.26% (ranging from -0.24 to 0.83) when compared with the average ratio of Accounting Software (AS) which stood at 49.66% (ranging from 0.1 to 2.57).

CorrelationAnalysis

Table 2 Result of CorrelationMatrix ofDependent andIndependent Variables

| Variable | QFR | CDA | AS |
|----------|---------|--------|--------|
| QFR | 1.0000 | | |
| CDA | 0.0336 | 1.0000 | |
| AS | -0.0463 | 0.1564 | 1.0000 |

Source: Stata 13 Output Results based on study data

The correlation results in table 2 showed that most correlation coefficients between the predictor variables were generally low. The highest coefficients of correlation representing relationships between variables were between accounting software and cloud accounting (0.1564) followed by accounting software and quality financial report (0.0463). The coefficients of correlation between CDA and AS showed a positive relationship of (0.1564). Generally, these results of pairwise correlation analysis did not appear to suggest any concern with regard to manifestation of multi-collinearity problems in the process of estimating there gressionmodels.

This study has shown that cloud computing is beneficial to business entities. It helps to increase the quality of financial reports because it is presented in a more organized way with sophisticated cloud accounting software. According to Gupta and Guar (2018) the benefit of Cloud Accounting is that it works same as accounting works however utilizing web. Cloud supplier gives the online server from where any client, organization or association can get to their information through web. As of now cloud bookkeeping is beginning from enlightening society which is prepared to change itself from utilizing customary strategy for information dealing with and capacity to electronic data arrangements. Solicitations can be filtered immediately and scattered to the bookkeeping framework consequently after which checking and affirming the section should be possible by bookkeeper. It prompts cost sparing in preparing as the checking of solicitations should be possible in mass by customer themselves. So as to evaluate their business execution, they simply need to sign into the bookkeeping association's entrance. The data of money vacillation's effect or following of income should be possible which is useful in creating confidence in business choices of customers. Different administrations like business investigation or income determining can be rendered by bookkeepers to offer a top to bottom budgetary mastery which is fundamental to guarantee development of business.

Further, Cloud-based bookkeeping frameworks give the devices to destroy dangers of error and irregularity of information that frameworks worked by ancestor made. It likewise assists with making reviews and authentic following helpful, most cloud based stages structure a review trail as part of their

general record. This use of cloud accounting can help small and medium scale organization capture their transactions appropriately and accurately however it has some disadvantages which must be looked into for Future development and upgrading. According to Tahmina, (2017), Gupta and Guar (2018) and Rao, Jyotsna&Sivani, (2018). Some of the disadvantages of using cloud accounting is the lack of security of financial data in the cloud. Professional hackers can break into vital information of companies in the cloud thereby manipulating and compromising such information. Financial information is the most sensitive information in an organization which needs to be protected by all means. Saving information in the cloud could lead to high cost of maintenance which SMEs might not be able to afford. Business entities should be introduced to cloud based accounting systems that suits their purpose and it should be affordable at the same time.

CONCLUSION AND RECOMMENDATIONS

The quick development of distributed computing has gotten a prevailing noteworthy in creating nations; great deals of firms are searching for advanced method of completing their activities. Distributed computing innovation (Cloud accounting) has brought putting away and overseeing information on virtualized servers so that, applications, people and associations around the globe can be able to interface with information and registering assets anyplace and whenever. This thought of putting away information or running applications on mists has been demonstrated effective in improving the unwavering quality in money related revealing since the information and application are stockpiled sponsored up in the cloud which diminishes the opportunity of information and application misfortune. Cloud accounting has been believed to be valuable to both little and medium scale undertakings in Nigeria for the most part as a result of the enormous number of SMEs in the nation.

There is need for the management of an organization to improve the quality of financial reporting through cloud accounting. Cloud accounting is a very important tool which aids the credibility of the financial state and also helps in increasing the performance of SMEs. Those charged with governance should render their supports in the process of adopting cloud computing The policy makers should adjust certain policies that are unfavorable and abolish outdated policy. most times policies adopted are not favorable SMEs. The policy makers should review policies related to subsidies that will enable SMEs grow their businesses and adopt cloud accounting technologies. The policy makers should be able to understand the economic situation and profer appropriate solutions to achieve a growing economy. The government should provide funds through loan facilities, incentives schemes and subsidies on products. This will help SMEs to generate revenue that will help them adopt emerging technologies which will lead to economic development on the long run. The government should understand the need for small businesses to grow and also make regulations that are favorable to SMEs. Computer technologist should carry out more studies on emerging technologies and innovations, find lasting solutions to cloud security issues and ways to make adoptions and the transition period for SMEs smooth.

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Effect of Intellectual Capital on Performance of Multinational Companies in Nigeria

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Abstract

In recent times, intellectual capital efficiency is the driving force for performance. This study seeks to ascertain the effect of intellectual capital on the performance of multinational companies in Nigeria. The longitudinal research design employed and data collected from the sampled twenty-four multinationals for the period of ten years 2010 to 2019. The data for the study analyzed using a panel regression with the aid of STATA 16 software. Resource-based theory underpinned the study. Price earning (PE) ratio used as a proxy for performance in the study; while intellectual capital the independent variable of the study proxied by Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE). The control variables Revenue Growth (REVG), Firm Size (LFSIZ), and Firm Age (FAGE). The result revealed that Capital Employed Efficiency (CEE) has significantly and positively impacted the performance of multinational companies operating in Nigeria. Other independent variables, Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE) do not affect the performance of multinational companies in Nigeria. The study recommends that companies should invest in more revenue-generating activities as it significantly improved the performances of companies. They should pay attention to the development of human capital and infrastructure, subsequently affect the performance of companies in Nigeria.

Keywords: Intellectual Capital, Value-Added Intellectual Coefficient (VAIC), Performance, Multinationals

INTRODUCTION

The focus of global investment and reporting is shifting from traditional corporate reporting that accounts mostly for financial capital to reporting in an integrated manner that incorporates financial, manufactured, intellectual, human, social and relationship and natural capitals. Organization for Economic Co-operation and Development asserts that investment is gradually moving from physical assets to intangible assets (OECD, 2015). In the 1970s tangible assets account for only 20% of the total market value of S & P 500 companies which indicates that the significant intangible value of the assets of companies remains unaccounted for. Intellectual capital is a component of intangible assets (IAS, 38). Intellectual capital is defined by Value-Added Intellectual Coefficient (VAIC). The VAIC consist of three components: Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE). Currently, the stock portfolio performance of the Standard and Poor's 500 (S&P 500) index shows that the top five (5), S& P 500 are technological and intellectually based companies. The top 5 companies in descending order Apple Inc., Microsoft Corporation, Amazon.Com Inc., Facebook and Google. Empirical evidence showed that the intellectual capital and intangible assets significantly improved profitability, efficiency and over the performance of companies (Bontis et al., 2018, Kasogo, 2020, Ousama et al., 2020). For companies to have a cutting edge advantage and sustain relevance globally, the need to continuously innovate and develop new technologies and the sharpening of skills and knowledge of employees becomes critical (Baye et al., 2014).

Although, Nigeria is yet to adopt an integrated reporting system, however, multinational companies operating in Nigeria whose parent companies adopted an integrated reporting approach to this study sought to assess the effect of intellectual capital on the performance of multinational companies in Nigeria. This study, therefore aims at assessing the effect of intellectual capital on the performance of multinational companies operating in Nigeria. The basic hypothesis underlying this study are stated thus:

H₀₁: Capital employed efficiency has no significant effect on the performance of listed multinational companies in Nigeria.

H₀₂: Human capital efficiency has no significant effect on the performance of listed multinational companies in Nigeria.

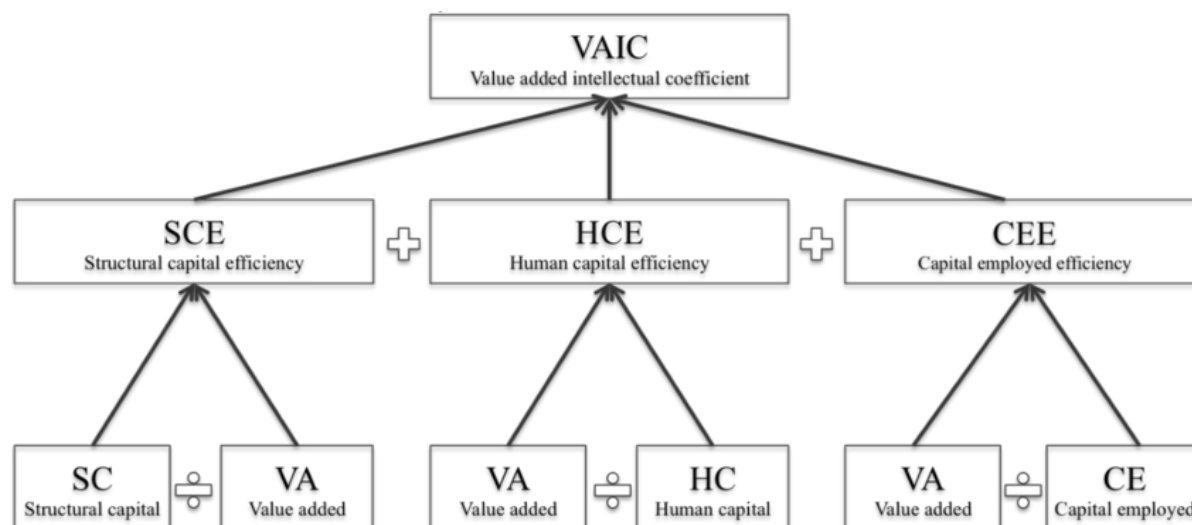
H₀₃: Structural capital efficiency has no significant effect on the performance of listed multinational companies in Nigeria.

LITERATURE REVIEW

Conceptual Framework

This study adopted Value-Added Intellectual Coefficient (VAIC) conceptual model from (Bontis et al., 2018 Yusuf, 2018, Kasogo, 2020, Sulaiman et al., 2020, Duho & Agomor, 2021). The VAIC is made up of three components Structural Capital Efficiency (SCE), Human Capital Efficiency (HCE) and Capital Employed Efficiency (CEE) as shown below:

Figure 1: Conceptual Model of Value-Added Intellectual Coefficient (VAIC)



Source: Kompalla, 2016

Value-Added Intellectual Coefficient (VAIC) is a measure of intellectual capital and evaluating the efficiency of investment in intellectual capital in relation to value creation (Agbi et al. 2020). Structural Capital Efficiency (SCE) on the other hand, is the ratio of structural capital to value added. Human Capital Efficiency (HCE) measures value added to investment in human capital and is an indication human capital performance (Agbi et al. 2020), while Capital Employed Efficiency (CEE) is the ratio of value added to capital employed (Kompalla, 2016), thus; Intellectual Capital (IC) = VAIC = SCE+HCE+CEE.

Empirical Review

Bontis (2018) examined the relationship between intellectual capital (IC) and economic performance with a focus on social cooperative enterprises (SCEs) for not-for-profit-making organizations in Italy. One hundred and fifty-one (151) Social Cooperative Enterprises for the study. Multiple regression used in analyzing the dependent variable (Return on Assets, ROA) and independent variables VAIC components (Human capital, relational capital, and structural capital). The study discovered that human and relational capital positively affected the economic performances of SCEs not-for-profit organizations in Italy. Yusuf

(2018) studied the impact of intellectual capital on the performance of Deposit Money Banks (DMBs) in Nigeria. The designed and sourced data from a primary source through administration of questionnaire and secondary source from the published financial statements of the 19 DMBs in Nigeria from 2006 to 2017. Resource-Based Theory, Human Capital Theory and Stakeholder Theory, VAIC model and regression model employed in the establishment of causal relationship among the variables of the study. The study revealed that Structural Capital Efficiency significantly impacted the performance of Deposit Money Banks in Nigeria while Capital Employed Efficiency, Human Capital Efficiency and Relational Capital Efficiency showed a non-significant relationship with the performances of DMBs in Nigeria.

Panel data sourced from listed firms on Da res Salaam Stock Exchange (DSE) were employed by Kasogo (2020) to investigate the effect of intellectual capital on the performance of listed firms in the manufacturing and service sectors from 2010 to 2019. Although DSE a small stock exchange market with 28 listed firms across all sectors of the economy. The study anchored on the Resource-Based Theory of knowledge and the concept of Value Added Intellectual Coefficient (VAIC) in establishing relationship among the variables of the study. The study employed four proxies for performance as the dependent variable (Return on Assets (ROA), Asset Turnover Ratio(ATO), Sales Growth (SG), and TOBIN's Q (Market Value)). Intellectual Capital (IC) the dependent variable of study proxied by Human Capital Efficiency (HCE), Capital Employed Efficiency (CEE) and Structural Capital Efficiency (SCE). Firm size is the control variable of the study ascertained by taking the logarithm of the sales for the period of study. The regression model used in the analysis of Human Capital Efficiency (HCE), Capital Employed Efficiency (CEE) and Structural Capital Efficiency (SCE) on performance. The outcome of the study revealed that Structural Capital Efficiency (SCE) affected performance while Human Capital Efficiency (HCE), Capital Employed Efficiency (CEE) negatively impacted performance which called for more investment in the human capital of companies in Tanzania. Ousama et al., 2020 investigated the impact of intellectual capital (IC) on the financial performances of thirty-seven (37)Islamic banks transacting in the Gulf Cooperation Council (GCC). The period of study covered three years from 2011 to 2013 and data sourced from the financial statements of the Islamic banks in GCC. The Return on Assets (ROA) and Return on Equity the dependent variables of the study. The VAIC components Capital Employed Efficiency (CE), Human Capital Efficiency (HC), and Structural Capital Efficiency (SC) are the independent variables of the study. Ordinary Least Square (OLS) employed in the analysis of the variables of the study. The outcome of the study revealed that Capital Employed Efficiency and Human Capital Efficiency significantly affected the financial performance (ROA and ROE) of Islamic banks but Structural Capital Efficiency insignificantly impacted the financial performance of Islamic banks operating in GCC.

Sulaiman et al., 2020 investigated the effect of Value Added Intellectual Coefficient (VAIC) on the financial performance of Health Care Firms in Nigeria from 2009 to 2019. The independent variable is the intellectual capital; return on assets (ROA) dependent variable of the study and managerial ownership introduced as the moderating variable. Financial leverage and Firm age were the control variables and Resource-Based Theory underpinned the study. The ex-post factor research and Ordinary Least Square (OLS) regression were adopted. The study disclosed that VAIC insignificantly affected financial performance (Return on Assets). Meanwhile, further analysis with the moderating effect of managerial ownership made VAIC significantly impacted Return on Assets (ROA). Zhang et al., 2021 research on the effect of intellectual capital investment on the performance of the textile and apparel companies in China. A sampled 35 companies for the period of six years (2013 to 2018) with modification to Value added intellectual coefficient (MVAIC). The dependent variables Profit Margin (PM), Return on Assets (ROA), and Return on Equity (ROE) proxied performance. The intellectual capital (IC) the independent variables proxied by Structural Capital Employed (SCE), Physical Capital, Human Capital Efficiency (HCE), Relational Capital Efficiency (RCE) and Innovation Capital Efficiency (INCE). The control variables include Firm Size determined by the natural logarithm of total assets, Debt ratio, Firm age ascertained by the logarithm of incorporation date of companies, and Gross Domestic Product (GDP). Physical Capital, Human Capital, Structural Capital and Relational Capital greatly influenced the

performances of textile and apparel companies in China. However, Innovation Capital failed to stimulate performance.

Duho and Agomor (2021) assessed the impact of intellectual capital on the performances of listed non-financial firms in the West African Sub-region. Sixty-two (62) companies sampled across West African Countries of Ghana, Nigeria and Cote d'Ivoire. The Value Added Intellectual Coefficient (VAIC) proxied intellectual capital (IC), the independent variable of the study. Return on Assets (ROA) represented performance the dependent variable of the study. A panel correction standard error multiple regression used to establish the relationship among the variables of the study. The result showed that Structural Capital Efficiency (SCE) influenced performance significantly while Human Capital Efficiency (HCE) and Capital Employed Efficiency (CEE) insignificantly affected the performance of non-financial firms in West Africa. Asare et al., 2021 examined twenty-four banks in Ghana, West Africa, from 2006 to 2015 in establishing a relationship between intellectual capital (IC) and assets quality. Intellectual capital is the independent variable of the study proxied by the Value-Added Intellectual Coefficient (VAIC) which consists of Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE). Asset quality of the bank the dependent variable of the study proxied by the ratio of non-performing loans to gross loans and advances of the bank. Panel regression used in the analysis and the study found the VAIC does not affect the quality of the asset of banks. However, when VAIC broke into parts analysis that Human Capital Efficiency and Structural Capital Efficiency significantly affected the quality of the assets of the banks. It was established from the literature reviewed that Value Added Intellectual Coefficient (VAIC) broken down into three components: Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE) served as a proxy for intellectual capital. Most studies used Return on Assets (ROA), Return on Equity (ROE), TOBIN's Q, Profit Margin (PM) as proxies for the dependent variable (financial performance). The effect of intellectual capital on financial performance in various sectors of the Nigerian economy and beyond were examined. However, specifically little or no studies assessed the effect of intellectual on performances of listed multinational companies operating in Nigeria. This study is undertaken to explore this gap. The study adopted Price-Earning (PE) ratio as the measure of financial performance of the Multinationals doing business in Nigeria.

Theoretical Discussion

Resource-Based Theory

The resource-based theory postulates that the image and reputation of a company aiming at sustaining competitive advantage by effective and efficient utilization and control of resources that are both tangible and intangible (Baye et al.). The concept of value-added is adjudged valid measure for conceptualizing a company's performance. Morris et al. 2010 established that Resource-Based Theory in a portfolio of resources, the conceptualization resource-based theory of firm resources in a situation where the quality and the availability of the number of resources in a portfolio is the prime factor in the determination of organizational performance. In this study, resource-based theory is the solid foundation in explaining the intellectual capital resources in influencing the performance of multinational companies in Nigeria. A component of intellectual capital the capital employed efficiency significantly influenced the performance of multinational companies in Nigeria.

METHODOLOGY

The study used a longitudinal research design because the researchers would not interfere with the variables of data collected. Longitudinal research design allows participants to collect data for a group over time. The population of the study consists of forty multinational companies operating in Nigeria, out of which a sample of twenty-four companies selected using the purposive sampling technique. The data of the sampled companies sourced based on the data availability, from the Nigerian Stock Exchange (NSE) and the published financial statements. The study period is for 10 years, from 2010 to 2019. The

data for the study analyzed using a panel regression with the aid of STATA 16 software. Post regression diagnosis conducted using Jacque-Bera normality test, Variance Inflation Factor (VIF). Breusch-Pagan / Cook-Weisberg tested for heteroskedasticity, Breusch and Pagan Lagrangian multiplier tested for random effects and a robust random test, Hausman was conducted. The study is carried out at a 5% significant level.

Model Specification

Price earning (PE) ratio used as a proxy for performance in the study; while intellectual capital the independent variable of the study proxied by Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE). The control variables Revenue Growth (REVG), Firm Size (LFSIZ), and Firm Age (FAGE). In examining the effect of intellectual capital on the performance of multinational companies operating in Nigeria the study adopted with modification the model applied by Lu et al. 2021 as follows:

$$PE\ ratio_{it} = b_0 + b_1CEE_{it} + b_2HCE_{it} + b_3SCE_{it} + b_4REVG_{it} + b_5LFSIZ_{it} + b_6FAGE_{it} + \epsilon_{it} \dots\dots\dots(1)$$

Where PE ratio = shareholders wealth the dependent variable of the study.

Independent variables:

CEE = Capital Employed Efficiency

HCE = Human Capital Efficiency

SCE = Structural Capital Efficiency

Control variables

REVG = Revenue Growth

LFSIZ = Firm Size

FAGE = Firm Age

$b_0, b_1, b_2, \dots, b_t$ = coefficient of the regression.

i = number of multinational companies, t = number of years

ϵ = error or random variable or residual

Variables Measurement

Price to Earnings per share (PE ratio) in numbers is computed as the annual average monthly closing share price divided by Earnings Per Share (EPS). PE ratio = [Share Price/EPS]. The EPS is calculated by dividing profit or loss attributable to ordinary equity holders of the parent divided by the weighted average number of ordinary shares outstanding during the period.

Capital Employed Efficiency (CEE) in numbers is computed as Revenue minus Cost of Revenue divided by Total Assets minus Intangible Assets (CEE=R-CR/TA-IA).

Human Capital Efficiency (HCE) in numbers is calculated as Revenue minus Cost of Revenue divided by Staff Cost (HCE=R-CR/SC).

Structural Capital Efficiency (SCE) in numbers is computed as Revenue minus Cost of Revenue and Staff Cost divided by Revenue minus Cost of Revenue.

$$SCE = [(R - CR + SC) / (R - CR)].$$

Value Added Intellectual Coefficient (VAIC) in numbers is calculated as the sum of Capital Employed Efficiency plus Human Capital Efficiency plus Structural Capital Efficiency.

$VAIC = [CEE + HCE + SCE]$.

Revenue Growth (REVG) is calculated by dividing the current year revenue minus the previous year revenue by the previous year revenue. $REVG = (CYR-PYR/PYR)$.

Firm Size (LFSIZ) is arrived at by taking the natural logarithm of total assets of companies.

Firm Age (FAGE) is the number of years after being listed on the floor of the Nigerian Stock Exchange.

Table 1: Study Variable Measurements

| Variable Acronym | Variable Name | Measurement | Source(s) |
|------------------|--------------------------------------|--|---------------------------------------|
| PE ratio | Price Earning ratio | Profit or loss attributable to ordinary equity holders divided by weighted average number of ordinary shares | (IASPLUS.COM, 2021) & NSE, 2021). |
| CEE | Capital Employed Efficiency | $CEE=R-CR/TA-IA$ | Chikwendu, Okafor & Jesuwunmi (2020). |
| HCE | Human Capital Efficiency | $HCE=R-CR/SC$ | Chikwendu, Okafor & Jesuwunmi (2020). |
| SCE | Structural Capital Efficiency | $SCE = \frac{(R- CR+SC)}{(R-CR)}$ | Agbi, Popoola &Edem (2020). |
| VAIC | Value Added Intellectual Coefficient | $CEE + HCE + SCE$ | Agbi, Popoola &Edem (2020). |
| REVG | Revenue Growth | $(CYR-PYR/PYR)$ | Kasogo (2020) |
| LFSIZ | Firm Size | Log of Total assets | Agbi, Popoola &Edem (2020). |
| FAGE | Firm Age | number of years listed on the NSE | Chikwendu, Okafor & Jesuwunmi (2020). |

Source: Author's Compilation, 2021

RESULTS AND DISCUSSION

At this point, the empiricval results and the discussion of findings are presented.

Table 2 Descriptive Statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|----------|-----|----------|-----------|---------|----------|
| PERatio | 240 | 13.10733 | 47.11764 | -294 | 512 |
| CEE | 240 | .2537967 | .1703919 | -.0418 | .762 |
| HCE | 240 | 4.006661 | 2.811988 | -1.4968 | 20.5385 |
| SCE | 240 | .7712923 | .2566615 | 0 | 2.113315 |
| REVG | 240 | 6.090355 | 28.4255 | -100 | 182.2137 |
| LFSIZ | 240 | 7.578032 | .922728 | 0 | 9.2733 |
| FAGE | 240 | 32.275 | 11.30665 | 0 | 47 |

Source: Researchers Analysis using STATA 16

Table 2 above presented the descriptive statistics for one dependent variable (Price Earnings, PERatio), three independent variables (Capital Employed Efficiency, CEE; Human Capital Efficiency, HCE, and Structural Capital Efficiency, SCE) and three control variables (Revenue Growth, REVG; Firm Size, LFSIZ, and Firm Age, FAGE). The total number of observations is 240 with standard deviations of the variables from the mean ranging from 0.1703 to 47.12. The Capital Employed Efficiency (CEE) has the lowest standard deviation of 0.1703 followed by Structural Capital Efficiency (SCE), Firm Size (LFSIZ), Human Capital Efficiency (HCE), Firm Age (FAGE) and the PERatio with standard deviations of 0.2567, 0.9227, 2.8120, 11.3067 and 47.1176 respectively. The Table also showed an average of 13.11 for PERatio with minimum and maximum values of -294 and 512 respectively. Capital Employed Efficiency (CEE) has a mean of 0.2538 with a standard deviation of 0.1703; the maximum CEE is 0.762 and a minimum value of negative 0.418. The Human Capital Efficiency (HCE) for the period has an average of 4.0067 with a standard deviation of 2.8112. The highest value for HCE is 20.5385 and the least value of negative 1.4968. The Structural Capital Efficiency (SCE) average 0.7713 with a standard deviation of 0.2567; the maximum and minimum values of SCE for the period are 2.1133 and zero respectively.

Table 3 Correlation Matrix

| PERatio | CEE | HCE | SCE | REVG | LFSIZ | FAGE | |
|---------|---------|--------|---------|---------|---------|---------|--------|
| PERatio | 1.0000 | | | | | | |
| CEE | 0.2471 | 1.0000 | | | | | |
| HCE | -0.0204 | 0.1527 | 1.0000 | | | | |
| SCE | 0.0143 | 0.2338 | 0.5080 | 1.0000 | | | |
| REVG | 0.0636 | 0.1020 | -0.0103 | 0.0018 | 1.0000 | | |
| LFSIZ | 0.0857 | 0.0283 | 0.0475 | -0.1183 | 0.2616 | 1.0000 | |
| FAGE | 0.0100 | 0.0168 | -0.1344 | 0.0571 | -0.1388 | -0.0133 | 1.0000 |

Source: Researchers Analysis using STATA 16

Correlation measures the degree or strength of the relationship among variables. Table 3 above shows the correlation between the dependent and independent variables of the study. There is a positive correlation of 0.2471 between Price Earning (PERatio) and Capital Employed Efficiency (CEE) which implies that a unit change in CEE will cause a proportional change of 24.71% in PERatio. However, a negative correlation exists between Price Earning (PERatio) and the Human Capital Efficiency (HCE) a unit change in HCE would decrease the PERatio by 2.04%. A positive correlation of 0.0143 subsists between PERatio and Structural Capital Efficiency (SCE) meaning that a unit change in SCE causes a minimal positive in PERatio by 1.43%. Examining the correlation among independent variables (CEE, HCE, and SCE) revealed that there is an appositive correlation of 15.27% between Capital Employed Efficiency (CEE) and also a direct correlation of 23.38% between Capital Employed Efficiency (CEE) and Structural Capital Efficiency (SCE). Moreover, a positive 50.80% correlation exists between Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE). A unit change in HCE would cause a direct change of 50.80% in SCE. There is an absence of multicollinearity among the independent variables,

Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE) because their correlation is below 70%.

Table 4 Vaiance Inflation Factor (VIF)

| Variable | VIF | 1/VIF |
|----------|------|----------|
| SCE | 1.47 | 0.679020 |
| HCE | 1.43 | 0.698093 |
| LFSIZ | 1.11 | 0.897267 |
| REVG | 1.11 | 0.897522 |
| CEE | 1.07 | 0.932114 |
| FAGE | 1.07 | 0.936884 |
| Mean VIF | 1.21 | |

Source: Researchers Analysis using STATA 16

The mean of Variance Inflation Factor is 1.21 from table 4 above. The VIF of 1.21 is less than the benchmark of 10 and 1/VIF below 1.00 indicates that the independent variables of the data have no multicollinearity problem among the independent variables.

Table 5 Jarque-Bera (JB)Normality Test

| | Chibar ² | JB value |
|---------|---------------------|----------|
| PERatio | 3.90 | 0.0000 |
| CEE | 24.22 | 5.5e06 |
| HCE | 736.90 | 1.e160 |
| SCE | 458.3 | 3.e100 |
| REVG | 719.60 | 6.e157 |
| LFSIZ | 3296.00 | 0.0000 |
| FAGE | 39.82 | 2.3e09 |

Source: Researchers Analysis using STATA 16

From Table 5 above, Jacque-Bera result of variables shows that the data is normally distributed.

Table 6 Fixed effect, Random effect regression, Hausman and Lagrangian multiplier test.

| | Chibar ² | Prob.> chi ² |
|---|---------------------|-------------------------|
| Fixed effect | 0.36 | 0.9064 |
| Random effect | 33.57 | 0.0000 |
| Breusch and Pagan Lanrangian multiplier | 0.00 | 1.0000 |
| Hausman test | 11.15 | 0.0837 |

Source: Researchers Analysis using STATA 16

In determining whether the pooled OLS and random effect regression is the most suitable, the LM test for random effect adopted. The chi-bars² in Table 6 above is 0.00 and the corresponding prob > chi bar was 1.000, the analysis rejected the null hypothesis and adopted the alternative hypothesis that random effect is the most appropriate model. Furthermore, both fixed and random effect regressions used in the analysis. The Hausman decision criteria employed in deciding between fixed and random effect regression models. The test generated a chi-square value of 11.15 and a probability value of 0.0837, which implies that the random effect regression model is the most appropriateforthe data and interpretation.

Table 7 Robust Random Effect Model

| PEratio | Robust | | | | | |
|---------|-------------------------------------|-----------|-------|-------|----------------------|----------|
| | Coef. | Std. Err. | z | P> z | [95% Conf. Interval] | |
| CEE | 70.11658 | 14.77134 | 4.75 | 0.000 | 41.16528 | 99.06788 |
| HCE | -.9940427 | .6703197 | -1.48 | 0.138 | -2.307845 | .3197599 |
| SCE | -1.087751 | 7.678516 | -0.14 | 0.887 | -16.13737 | 13.96186 |
| REVG | .028808 | .0965341 | 0.30 | 0.765 | -.1603953 | .2180113 |
| LFSIZ | 3.886811 | 2.857326 | 1.36 | 0.174 | -1.713446 | 9.487067 |
| FAGE | .0061919 | .250762 | 0.02 | 0.980 | -.4852925 | .4976763 |
| _cons | -29.69593 | 24.8422 | -1.20 | 0.232 | -78.38575 | 18.99389 |
| sigma_u | 0 | | | | | |
| sigma_e | 45.805052 | | | | | |
| rho | 0 (fraction of variance due to u_i) | | | | | |

Source: Researchers Analysis using STATA 16

The robust random effect regression result for the sampled multinational companies in Nigeria depicted in Table 7 above revealed that there is a significantly positive relationship between Capital Employed Efficiency (CEE) and shareholders wealth (proxied with the price earning ratio (PEratio)) as indicated by a coefficient value of 70.1166. This revealed that for one unit rise in CEE le would lead to a 70.1166 unit increase in shareholders wealth. The probability of CEE of 0.0000 confirmed that at 1% significant level Capital Employed Efficiency (CEE) significantly impacted shareholders wealth. An inverse relationship exists between Human Capital Efficiency (HCE) and the shareholders wealth meaning a unit rise in HCE leads to a fall in shareholders wealth by 0.9940. Similarly, Structural Capital Efficiency (SCE) has an inverse relationship with the shareholders wealth of multinational companies in Nigeria. A unit increase in Structural Capital Efficiency results in a decrease in the wealth of shareholders by 1.0878. In addition, Revenue Growth (REVG), Firm Size (LSIZE), and Firm Age (FAGE) of the sampled multinational in Nigeria has a positive relationship with the P/E ratio as explained by a coefficient of 0.0288, 3.8868, and 0.0062 indicating that for every unit increase in Revenue Growth, Firm Size, and Firm Age the will cause an increase in shareholders wealth proxied with P/E 0.0288, 3.8868, and 0.0062 units respectively.

Test of Hypotheses

Hypothesis 1: Capital Employed Efficiency has no significant effect on the performance of multinational companies in Nigeria.

The regression results as presented in Table 6 shows that the Capital Employed Efficiency has a significant effect on performance at a 5% level of significance. This provided the study with evidence of the probability of $P>|z|$ of 0.0000, therefore rejecting the null hypothesis and accepting the alternative hypothesis that Capital Employed Efficiency has a significant positive effect on the performance of multinational companies in Nigeria.

Hypothesis 2: Human Capital Efficiency has no significant effect on the performance of listed multinational companies in Nigeria.

The regression outcome as presented in Table 6 reveals that Human Capital Efficiency has no significant effect on the performance at a 5% level of significance. The study, therefore, rejects the alternative hypothesis and accept the null hypothesis that Human Capital Efficiency has no significant effect on the performance of multinational companies in Nigeria.

Hypothesis 3: Structural Capital Efficiency has no significant effect on the performance of multinational companies in Nigeria.

The Structural Capital Efficiency of the sampled multinational companies during the study period has no significant effect on performance at the 5% level. The study rejects the alternative hypothesis and accept the null hypothesis and conclude that Structural Capital Efficiency has no significant effect on the performance of multinational companies in Nigeria.

Discussion of Findings

The result revealed that Capital Employed Efficiency (CEE) has significantly and positively impacted the performance of multinational companies operating in Nigeria. Other independent variables, Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE) do not affect the performance of multinational companies in Nigeria. The outcome of the study is inconsistent with Asare et al., 2021 that Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE) significantly impacted the financial performance and assets quality of banks in Ghana. However, our findings are consistent with Ousama et al., 2020 that Capital Employed Efficiency (CEE) greatly affected the performance of companies.

CONCLUSION AND RECOMMENDATION

In conclusion, Capital Employed Efficiency influenced significantly the performance of multinational companies in Nigeria, while Human Capital Efficiency and Structural Capital Efficiency does not affect the performance of multinational companies in Nigeria. The study concludes that capital employed efficiency is critical to the growth and survival of companies in Nigeria. The study recommends that companies should invest in more revenue-generating activities as it significantly improved the performances of companies. Companies should pay attention to the development of human capital, in turn, will positively affect the performance of companies in Nigeria. Investment in infrastructural development recommended would create an enabling environment for companies to thrive in Nigeria.

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Foreign Ownership and Firm Financial Performance of Nigerian Listed Conglomerates

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Abstract

This study was undertaken to examine the relationship between foreign ownership and firm financial performance of quoted conglomerates in Nigeria. To achieve the objective, this study used panel regression model to analyse the data obtained from the financial statements of the five (5) conglomerates quoted on the Nigerian Stock Exchange (NSE) for a period of 15 years (2006 – 2020) and market data on share prices were obtained from the NSE historical market data portal. Return on Assets (ROA) and Tobin's Q were used as proxies for financial performance measuring performance from both accounting based and market-based perspectives. The data collected were estimated by fixed-effects and random-effects regression estimations and Hausman Test of Specification was applied to determine the better estimator for the models. The findings revealed that foreign ownership has significant negative effect on ROA of the quoted conglomerates in Nigeria but insignificant negative relationship when measured with Tobin's Q. The study therefore recommends that Government of Nigeria and its agencies should ensure they put policies in place which will encourage Foreign Direct Investment (FDI) and at the same time check practices of those foreign owned companies to ensure they are not involved in practices that amounts to repatriation of profits abroad while reporting losses to avoid payment of tax; and Managers or Directors are advised to maintain optimal capital structure so as to maximize firm performance and to avoid embarking on projects that add no value to the organisation as a whole.

Keywords: Foreign Ownership, Firm Financial Performance, Listed Conglomerate, Nigeria

INTRODUCTION

Every corporate entity has its rightful owners. These are the ordinary shareholders that have voting right concerning issues that affect the company. These shareholders or owners are of different categories and could be of different compositions. For example, they could be insiders or outsiders; managers or non-managers; individuals, family, government or institutions; local or foreign owners; concentrated or diffused holders. This categorisation of owners or shareholders into different compositions is termed Ownership Structure. Hence, Ownership Structure of a firm can be viewed as the nature in which firm's equity holdings are categorised. It may also be viewed as stakeholder ownership proportion in the firm. Ownership structure is one of the core mechanisms of Corporate Governance (CG). The manner in which this ownership is composed of plays a key role in determining the firm financial performance and provides policy makers with insights for enhancing corporate governance system. Ownership structure has been a subject of discussion by both scholars and analysts. The pioneering study in the theory of the firm on contemporary firm was conducted by Berle and Means (1932). Ownership structure is very important and influential in determining the efficacy of the market by giving information about two significant things (Carvalho-da-Silva & Leal, 2004). Firstly, it will show the extent of risk diversification of shareholders and secondly, it will give possible agency problems encountered during managing the firm. Several studies have shown that the nature of firm's ownership has a great impact on firm's performance. The modern organization emphasizes the divorce of management and ownership; in practice, the interests of group managing the company can differ from the interests of those that supply the capital to the firm (Srivastava, 2011). Shareholders of publicly held corporations are so numerous and hold small units of shares that they are unable to effectively control the decisions of the management team, and thus cannot be assured that the management team represents their interests. Many solutions to this problem have been advanced, that is, the disciplining effect of the takeover market, the positive incentive effects of the management shareholding stake and the benefits of large monitoring shareholders.

Most of the empirical literature studying the link between ownership structure and firm performance usually consider different aspects of this corporate governance mechanism (ownership structure) such as

Managerial ownership, Institutional ownership, ownership concentration, government ownership and foreign ownership. This paper focuses on the relationship between foreign ownership and performance of Nigerian listed conglomerates. Foreign ownership is the proportion of the firm's shares owned by foreign investors either as individuals or corporate bodies. Governments in developing economies have encouraged foreign investors and companies to come and invest in their countries through Foreign Direct Investment (FDI) in order to boost their local economies. It is believed that if a significant portion of the firm's shares is held by foreign shareholders, it may be an indication that foreign shareholders trust those companies which may result in the higher companies' valuation. Hence, foreign ownership has the tendency to influence the performance of the firms positively. The confidence reposed on the foreign owners by existing and potential investors may lead to increase in share price (which increases Tobin's Q) and higher profits (which means higher Return on Assets). However, this may not be the case where there are no strong Corporate Governance principles and appropriate tax laws that protect foreign investors and allow them to get adequate return on their investments. Researches mostly in developed economies and few in developing economies have been conducted to establish the extent and nature of relationship between different aspects of ownership and firm financial performance. The studies have continued to report mixed findings. This is due to different Corporate Governance environments, data issues, variable measurements, and estimation methods.

In the Nigerian context, few of such studies have been conducted with focus on different sectors or industries of the economy. Gugong, Arugu and Dandago (2014) focused on the Nigerian Insurance companies, using Return on Assets (ROA) and Return on Equity (ROE) as proxies for financial performance. Obiyo and Lenee (2011) sampled 10 firms from banking, food, construction and oil industries and used Return on Equity (ROE), Net Profit Margin (NPM) and Dividend Yield (DY) as performance proxies. Others are Tsegba and Ezi-Herbert (2011), and Uwuigbe and Olusanmi (2012). However, of the known studies conducted in the Nigerian context, no research on foreign ownership – performance relation has been conducted on the listed conglomerates. Also, of the known studies conducted in Nigeria, no study has attempted to use Tobin's Q as a measure of performance which has been considered a strong measure of performance by many Researchers in other countries. Tobin's Q which is the ratio of the market value of firm's assets to their replacement cost is considered as a forward-looking measure of performance. Combining Return on Assets and Tobin's Q as proxies for performance means measuring performance from both inside and outside, accounting based and market based, from short term and long-term perspectives. The objective of this study is to determine the relationship between foreign ownership of Nigerian quoted conglomerates and firm financial performance. It specifically seeks to investigate the relationship between foreign ownership and firm performance of Nigerian quoted conglomerates by determining the extent to which foreign ownership significantly affects the financial performance of quoted conglomerates in Nigeria as measured by Return on Assets and Tobin's Q. It is believed that the results and outcome of this study should be of particular interest to several parties including regulatory authority of capital market (Security and Exchange Commission), existing and potential investors, accounting educators and other stakeholders in general. The outcome will enable SEC to examine the effectiveness of their monitoring instruments as well as review and improve Corporate Governance code and guidance on the conduct of public companies. On the side of investors, both existing and potential, the findings will help the investors know whether the proportion of foreign ownership of a Nigerian conglomerate significantly affects its financial performance and appropriate investment decisions will be taken. Finally, accounting educators and other researchers will find it as a motivation for further research and the research work will contribute to the existing empirical literatures on Ownership Structure and Firm Performance from emerging economies.

LITERATURE REVIEW

The relationship between ownership structure and firm performance has been a long subject of discourse. Several empirical studies have been conducted to prove or disprove theoretical underpinnings relating to ownership structure and firm performance. Berle and Means (1932) laid the foundation for the debate while Jensen and Meckling (1976) were first to propound the agency theory.

Conceptual Framework

Concept of Ownership Structure

Several authors and scholars have made attempts to explain what constitutes ownership structure. According to Jensen and Meckling (1976), ownership structure is the distribution of equity with regard to votes amongst shareholders, capital and also by the identity of the equity owners. Demsetz and Lehn (1985) documented that ownership structure represents the fraction of shares owned by a firm's most significant shareholders with most attention given to the fraction owned by the five largest shareholders. However, when looking at ownership structure from managerial perspective, Demsetz and Lehn (1985) see ownership structure as the fraction of shares owned by firm's management which include shares owned by members of the corporate board, Chief Executive Officer (CEO) and top management. Zhang (2005) defines ownership structure as stock-holders ownership proportion. Shah, Safdar and Mohammad (2011) see ownership structure as the percentage of shares held by Directors while Wahla, Shah, and Hussain (2012) view Ownership structure as the composition of managerial ownership and concentrated ownership. However, Uwalomwa and Olamide (2012) consider a broader view where ownership structure is seen as decisions made by those who own or who would own shares. They measured ownership structure as the composition of Board ownership, Institutional ownership and foreign ownership. This is obvious that authors have viewed ownership structure from different lenses – whether from ownership concentration, managerial, institutional, family, government or foreign ownership. One fact stands out, Ownership structure is simply a proportion or a share or a percentage of equity held by an individual, group of individuals, organisation or government. However, for the purpose of this study, ownership structure can be seen as the proportion of equity holding own by foreign investors either as individuals or institutions.

Foreign ownership, whether through individual investors or institutions, can boost market performance by offering a high level of financing, and the transference of their experience and knowledge to the market where they are investing (Gurunlu&Gursoy, 2010). Foreign ownership is measured by the ratio of foreign ownership stake to total shareholding as evidenced by Al Manaseer, Al-Hindawi, Al-Dahiyat and Sartawi (2012), Chari, Chen and Dominguez (2012) and Uwuigbe and Olusanmi (2012). There is lack of support to this variable in the previous empirical studies but the current study believes that foreign ownership is a factor that helps to align the interrelationship between owners and manager and at the same time mitigates the agency cost between the owners and managers. Foreign investors are of the most fundamental factors that help the separation between owners and shareholders and also helps the company to expand control over managers in the decision making process. It also provides established foreign expertise that gives a clear picture about the foreign investments. Finally, the foreign ownership helps to improve performance of firms. Moreover, if a significant portion of the firm's shares is held by foreign shareholders, it may be an indication that foreign shareholders trust those companies which may result in the higher companies' valuation (NazliAnum, 2010). More importantly, the opening of national economies to foreign trade and investment has great significance on corporate governance practices in the economies (Kim & Yoon, 2007). Other concepts of Ownership often studied are Managerial Ownership, Institutional Ownership, Ownership Concentration, Family Ownership and Government Ownership. However, for this paper focuses on Foreign Ownership. This is because studying foreign ownership helps to look at the effects of Foreign Direct Investment (FDI) at the micro level and among the firms being studied (listed Conglomerates), some are subsidiaries of foreign companies and hence have foreigners as members of the management team.

Concept of Performance

Firm performance is used to describe the state of affairs of a firm. In analysing a firm performance, emphasis should be made in formulating an adequate description of the concept of a firm's performance which will uncover the different dimensions upon which firm's performance should be evaluated. The measurement of performance can be very subjective, and different studies on how ownership structure

influences performance have used different indicators or proxies to depict performance. Proxies frequently used by previous researchers are Return on Equity (ROE), Return on Assets (ROA), Earnings Per Share (EPS), Net Profit Margin (NPM) (Obiyo&Lenee, 2011; Najjar, 2012; and Uwuigbe&Olusanmi, 2012). However, recent studies have considered Tobin's Q as a better measure of performance and hence, have used it solely or in conjunction with other accounting measures to determine firm performance (Ganguli& Agrawal, 2009; Jadoon and Bajuri, 2015; and Nuryanah& Islam, 2011).

Tobin's Q is the ratio of market value of assets to its replacement cost (Hu & Izumidia, 2008). It is considered a better measure of performance because in time perspective, it is forward-looking and it is market based valuation of a firm by investors which is beyond accounting measures that use data from accounting records that are influenced by accounting practices. However, in calculating for Tobin's Q, most researches use depreciated book value of assets as denominator of Q instead of replacement cost due to lack of data on replacement cost of assets. On the other hand, accounting profit rates such as ROA and ROE are backward looking measures of performance that use accounting records and are heavily determined by accounting practice. The pertinent question asked by Demsetz and Villalonga (2001) is whether it is more sensible to look at an estimate of what management *has* accomplished or at an estimate of what management *will* accomplish. The answer to the above question is to look at both. Hence, this paper looks at Tobin's Q in conjunction and in comparison with Return on Assets (ROA) as proxies for performance. This is to measure performance from what management has accomplished and what they will accomplish, to look at both backward and forward perspectives, to assess the long term and short term impact of corporate actions, and to measure the firm both from inside and outside perspectives.

Empirical Review

Generally speaking, theoretical and empirical researches supplement each other. Since the ownership-performance relation is subject to controversy in theory, empirical research becomes more important to examine which of the logically possible explanations is the most probable. Several studies have examined the relationship between corporate performance and different types/dimensions of ownership structure. This paper reviews only studies that focus on the relationship between foreign ownership and firm performance. There are many studies around the world that have investigated the relationship between foreign ownership and firm performance in both the developed countries and developing countries. In the end, they found a positive relationship. On the contrary, other authors have examined the association between foreign ownership and firm performance in both developed and developing countries and found no relationship (insignificant) between foreign ownership and firm performance. Uwuigbe and Olusanmi (2012) studied 31 financial firms in Nigeria from year 2006 to 2010 and used Multivariate Multiple Regression to estimate the model. They found a significant positive relationship between Foreign Ownership and firm performance when measured in terms of ROA. Same results were earlier documented by Ghahroudi (2011) when the ownership advantages and firm factors influencing performance of foreign affiliates in Japan were studied. 3500 Japanese foreign firms were studied in 2006 using Binary Logistic Regression method and Net Profit, ROA and ROS as proxies for performance.

However, few studies have found no relationship between Foreign ownership and firm performance both in developed and developing economies. From developing countries, Tsegba and Ezi-Herbert (2011) in their study of 73 Nigerian listed firms using OLS method and MPS and EPS as dependent variables found no relationship between Foreign ownership and firm performance. Gurbuz and Aybars (2010) reported the same results from Turkey when they used 205 non-financial listed companies for a 3-year period using quantile regression method and ROA as proxy for performance. Evidence of no or insignificant relationship between foreign ownership and firm performance from developed countries is also documented in the study of Shan and McIver (2011). They studied 540 Chinese firms from non-financial sectors listed on the Hong Kong Stock Exchange over 2001 – 2005 using OLS fixed effects estimation method and Tobin's Q as dependent variable and also reported no relationship between the variables. However, no study has reported a negative relationship between Foreign ownership and firm performance. Therefore, it can be seen from the previous empirical studies that there is no consensus among researchers as to the nature of relationship between foreign ownership and firm performance whether from developed or developing countries. In Nigeria, most researches have used solely accounting measures as performance proxies. For example, Gugong, Arugu and Dandago (2014) used ROA and ROE as proxies for performance, Obiyo and Lee (2011) used Return on Equity (ROE), Net Profit Margin (NPM) and Dividend Yield (DY). Hence, this paper attempts to look at this relationship in the Nigerian context using both Accounting based measure (Return on Assets) and Market based measure (Tobin's Q) as proxies for performance to determine the relationship between foreign ownership and firm of listed conglomerates in Nigeria. This is the gap which this paper seeks to address.

Theoretical Framework

There are several theories that explain the relationship between ownership structure and firm performance in the literature of Accounting. But only three theories are closely related to the study, namely: Shareholders' Theory, Opportunistic Theory and Agency Theory. Jensen and Meckling (1976) argued that agency relationship takes place when the principals engage the agents to perform some of their duties on their behalf. Agency cost arises because of conflicting interests of the managers and owners. The Agency Theory stresses the separation of ownership (principal) and managers (agent) in an organization. Therefore, it is believed that managers may sometimes pursue opportunistic behaviour which may conflict the goal of the owners (principals) and therefore destroy the wealth of the shareholders. Advocates of the Agency Theory viewed the manager (directors) as an agent to the shareholders that will mitigate conflicts and serve as the guardian to shareholders since they are involved in the day to day activities of the firm (Hermalin & Weisbach, 2000). As argued by Carvalhal-da-Silva and Leal (2004), agency problem between the managers and the shareholders can take place since managers may not be maximizing the shareholder's value. This paper adopts Agency Theory due to its relevance in resolving conflict that may arise between managers (agent) and shareholders (principal) of the companies which captures the relationship between the independent variables of the study and the dependent variables. Empirical evidence by the study conducted by several scholars on Ownership structure and firm performance in Nigeria and patterns of Nigeria's companies capture the key postulations of Agency Theory which serves as bases for the adoption.

METHODOLOGY

A research design encompasses the methodology and procedure employed to collect, measure and analyse data in doing a scientific research (Jim-Suleiman, 2015). This paper adopts descriptive research design to investigate the relationships between variables and to estimate the effect of foreign ownership on firm performance as proxies by ROA and Tobin's Q. This study uses secondary data obtained from the financial statements of all the sampled firms in the study and from the Nigerian Stock Exchange (NSE) fact book for the period covered by the study (2006 – 2020). The study focuses on all the conglomerates listed on the Nigerian Stock Exchange (NSE) as at 31st December 2020 and operating throughout the period of study (2006 – 2020). Conglomerates are companies composed of several unrelated and diversified number of businesses. On the NSE, they are classified under diversified industry. Because conglomerates engaged in unrelated and diversified businesses, they can be considered as the miniature of the companies listed on the stock exchange.

Model Specification and Variables Definition

This study employed Return on Assets (ROA) and Tobin's Q as proxies of firm performance. On the other hand, Foreign ownership is modelled as independent variables. Alongside the independent variables are Firm size and Firm leverage as control variables. Control variables are variables that help in explaining the relationship between dependent and independent variables. These are other factors that can affect the relationship between the dependent and independent variables. The modified models and variables were adapted from the studies of Jadoon and Bajuri (2015); and Uwuigbe and Olusanmi (2012).

The study modelled performance (ROA and Tobin's Q) against three explanatory variables (one independent and two control variables). The regression is specified into two empirical models representing the two proxies for performance. The models of the study are mathematically expressed as follows:

$$ROA_{i,t} = \beta_0 + \beta_1 FGOWN_{i,t} + \beta_2 FSIZE_{i,t} + \beta_3 FLEVI_{i,t} + \epsilon_{i,t} \dots (1)$$

$$Q_{i,t} = \beta_0 + \beta_1 FGOWN_{i,t} + \beta_2 FSIZE_{i,t} + \beta_3 FLEVI_{i,t} + \epsilon_{i,t} \dots (2)$$

Where:

$ROA_{i,t}$ = Return on Assets of conglomerate i in period t . It is a proxy for accounting rate performance measured by dividing firm's net income by total assets.

$Q_{i,t}$ = Tobin's Q of conglomerate i in period t . It is a proxy for market based performance measured as a ratio of firm's market value (year-end market value of common stock, and the book value of debt) to its replacement cost (year-end book value of its total assets).

$FGOWN_{i,t}$ = Foreign Ownership of conglomerate i in period t . Ratio of Foreign ownership stake to total shareholding

$FSIZE_{i,t}$ = Size of conglomerate i in period t (control variable). Natural log of the total assets

$FLEV_{i,t}$ = Leverage of conglomerate i in period t (control variable). Ratio of total debt to total assets

$\epsilon_{i,t}$ = component unobserved error term.

β_0 = the intercept or constant term

β_1 β_2 β_3 , β_4 , β_5 and β_6 = are slopes to be estimated.

i = conglomerate identifier (UACN, CHEL, JOHH, SCOA and TRAN) – (5 Conglomerates)

t = time variable (2006, 2007, ... 2020) – (Twenty Years).

Methods of Data Analysis

This study adopts the multivariate data analysis with Panel data regression. The reason for adopting panel data regression is that the study involved more than one conglomerate and data is collected at different periods of time. Moreover, following the panel nature of the data, the study employs both Fixed Effect (FE) model and Random Effect (RE) model. For the choice of a more consistent method between Fixed Effect Model and Random Effect Model, Hausman test of significance is employed as suggested by Torres-Reyar (2009). The study also conducted robustness tests to ensure the validity and fitness of the results. These include test for descriptive statistics, correlation analysis, Heteroskedasticity and Multicollinearity, to ensure that the results produce estimators that are best linear unbiased estimators. Heteroscedasticity test is conducted in this study to ascertain whether the error among the population is constant or not. If they are present, they are said to be Heteroscedastic and if absent, Homoscedastic is present as it is in agreement with assumption number 4 of Classical Regression Model which states that the covariance of the cross section error term is constant with the independent variables. Multicollinearity test is conducted using Variance Inflation Factor (VIF) and Tolerance Value (TV) to determine if the independent variables are highly correlated among themselves. Assumption number 6 of Classical Regression Model stipulates that there should not be multicollinearity among the variables. To ensure that this assumption is fully met, the study therefore carried out the tests in order to improve the validity of the result.

RESULTS AND DISCUSSIONS

The study employed econometric analysis method to realize the objective of the study. Data for 15 years were collected from the financial statements of the 5 quoted conglomerates under review. Descriptive and correlation statistics were estimated for the variables used in this study and are presented below. The summary of the descriptive statistics of the data collected is presented in Table 3.

Table 3: Summary of Descriptive Statistics of the Variables

| | ROA | Q | FSIZE | FGOWN | FLEV |
|-----------|-----------|----------|----------|-----------|-----------|
| Mean | 0.012303 | 1.020364 | 17.15211 | 0.366499 | 0.665541 |
| Median | 0.022600 | 0.930700 | 16.51760 | 0.530000 | 0.694300 |
| Maximum | 0.201200 | 2.923600 | 19.63910 | 0.682500 | 0.984200 |
| Minimum | -0.301400 | 0.568800 | 15.07060 | 0.000000 | 0.333700 |
| Std. Dev. | 0.079181 | 0.378654 | 1.261943 | 0.305119 | 0.163974 |
| Skewness | -1.174396 | 2.587247 | 0.493418 | -0.331797 | -0.247729 |
| Kurtosis | 6.282770 | 11.72512 | 1.778006 | 1.206822 | 2.252528 |

| | | | | | |
|--------------|----------|----------|----------|----------|----------|
| Jarque-Bera | 50.91689 | 321.5721 | 7.709738 | 11.42451 | 2.513106 |
| Probability | 0.668393 | 0.469446 | 0.201176 | 0.300305 | 0.284633 |
| Sum | 0.922700 | 76.52730 | 1286.408 | 27.48740 | 49.91560 |
| Sum Sq. Dev. | 0.463947 | 10.61003 | 117.8451 | 6.889217 | 1.989662 |
| Observations | 75 | 75 | 75 | 75 | 75 |

Source: EVIEWS Output

Table 1 presents the descriptive statistics of the data collected for the research variables. The table indicates that the accounting measure of financial performance of quoted conglomerates in Nigeria, Return on Assets (ROA) has an average value of 0.0123 with standard deviation of 0.0792, minimum value of -0.30718 and 0.2012 as the maximum value. The mean value indicates that the conglomerates have an average ROA of 1.23% and the standard deviation of 0.0792 implies that the deviation from the mean value, from both sides is 7.92%, implying that the data is widely dispersed from the mean because the standard deviation is high compared to the mean value. The minimum and maximum ROA of the quoted conglomerates during the period covered by the study are -30.72% and 20.12% respectively indicating the lowest and highest ROA reported by the quoted conglomerates within the period covered.

Table 1 also shows that the market-based measure of financial performance of the quoted conglomerates in Nigeria, Tobin's Q (Q) has a mean value of 1.203 and a standard deviation of 0.3787. This result indicates that on an average, the firms market values for the period were slightly higher than their book values by 20.3%. This implies that on the average, the shares of the conglomerates have not appreciated significantly for the period under review. The minimum value of 0.5688 and standard deviation of 0.3787 for Q show that there are conglomerates whose book values were higher than their market value during the period implying that their share prices were valued lower than the nominal value during the period under review.

On the other hand, zero as the minimum value for foreign ownership indicates that there are quoted conglomerates which are wholly indigenous while the maximum value of 0.6825 shows that the firm has 68.25% foreign ownership. Table 2 below explains the degree of association between the regressand (dependent variable) and the regressors (independent variables) and also the association between the regressors themselves. The values were extracted from the Pearson correlation of two-tailed significance.

Table 2: Correlation Matrix

| | ROA | Q | FSIZE | FGOW N | FLEV |
|-----------|--------------|--------------|--------------|-----------|------|
| ROA | 1 | -0.07364 | | | |
| Q | -0.07364 | 1 | | | |
| FSIZE | 0.08519 4 | -0.21549 | 1 | | |
| FGOW N | -0.17755 | 0.20547 6 | -0.9182 | 1 | |
| FLEV | -0.38645 | 0.27322 2 | -0.5548 2 | 0.70193 | 1 |

Source: EVIEWS Output

Table 2 presents the results of Pearson's correlation coefficient between the dependent and independent variables of Nigerian quoted conglomerates. Correlation matrix shows the degree of association that exists between variables. Foreign ownership (FGNOWN) negatively correlated to ROA and positively correlated to Tobin's Q by 17.76% and 20.55% respectively. This relationship is significant at 95% confidence level. On the control variables, leverage is significantly and negatively related to the dependent variable (ROA) by 38.65% while positively significant to Tobin's Q at 27.32%. Firm size significantly and positively relates to ROA at 8.52% and negatively to Tobin's Q at 21.55%. This research estimated the parameters using econometric software known as EVIEWS and three different regression models (Fixed Effects, Random Effects and Pooled Regression Models) were estimated for comparative analysis. Table 3 shows the results of some robustness tests for models one and two using EVIEWS.

Table 3: Summary of Regression Estimations

| | Model 1: Random Effects | Model 2: Fixed Effects | | |
|---|-------------------------|------------------------|------------|---------|
| | Statistics | P-value | Statistics | P-value |
| Hausman Test: Chi2 | 1.45 | 0.6939 | 16.3066 | 0.0010 |
| Breusch-Pagan / Cook-Weisberg: Hetttest | 4.9787 | 0.0064 | 2.6550 | 0.0664 |
| R ² | 0.3626 | | 0.1776 | |
| F-Test | 4.5946 | 0.0053 | 5.8063 | 0.0000 |

Source: EVIEWS Output

Table 3 presents the results of some robustness tests conducted to ensure valid and reliable interpretation of the estimation results of the models. Hausman Specification Test is applied to choose between Fixed Effects and Random Effects models as the better estimator. While Breusch-Pagan/Cook-Weisberg test is designed to detect any linear form of heteroscedasticity. Hausman test of Specification reports show that Random Effects is a better estimator of Model 1 while Fixed Effects is better for Model 2. This forms the basis of which regression model to use and test the hypothesis. The R² (R Squared) measures the overall fitness of a regression model. Table 3 reports R² value of 0.3626 for model one and 0.1776 for model two. This means that of all the factors affecting ROA and Q of Nigerian quoted conglomerates, 36.26% and 17.76% can be jointly explained by the independent and control variables in the models respectively. The F-test is designed to determine the overall significance of a regression model. Both models 1 and 2 show that the independent variables are jointly significant to ROA and Q at confidence level of 99%.

Hypotheses Testing

Tables 4 show the coefficients for Model one (ROA) and Model two (Q) with their associated p-values estimated using EVIEWS. The two models are stated as follows:

$$ROA_{i,t} = \beta_0 + \beta_1 MGOWN_{i,t} + \beta_2 OWNCO_{i,t} + \beta_3 FGOWN_{i,t} + \beta_4 FSIZE_{i,t} + \beta_5 FAGE_{i,t} + \beta_6 FLEVI_{i,t} + \epsilon_{i,t} \dots (1)$$

$$Q_{i,t} = \beta_0 + \beta_1 MGOWN_{i,t} + \beta_2 OWNCO_{i,t} + \beta_3 FGOWN_{i,t} + \beta_4 FSIZE_{i,t} + \beta_5 FAGE_{i,t} + \beta_6 FLEVI_{i,t} + \epsilon_{i,t} \dots (2)$$

Table 4: Summary of Regression Coefficients for ROA and Q

| | Model 1: Random | | Model 2: Fixed | |
|-----------------|------------------------|----------------|-----------------------|----------------|
| | Coefficient | P-Value | Coefficient | P-Value |
| Fgnown | -0.02688 | 0.01696** | -0.01167 | 0.1201 |
| Leverage | -0.22219 | 0.0055*** | 0.96891 | 0.0059*** |
| Firmsize | -0.01697 | 0.3592 | -0.05747 | 0.5096 |
| Constant | 0.46115 | 0.1677 | 5.64071 | 0.0005 |

| N | 75 | 75 |
|--|----|----|
| Dependent Variable: <i>ROA and Q</i> | | |
| Note: *, **, *** shows significance at 1%, 5% and 10% respectively | | |
| Source: EVIEWS Output | | |

Table 4 presents the coefficients with their associated p-value of the relationship between the dependent variables (ROA and Q) and the independent variables and the magnitude of the impact of the independent variables on the dependent variables. Fixed effects and random effects regressions as well as pooled regression model were run using EVIEWS. However, the results of Hausman Specification Test for both models shows that Random effects is the better estimator for Model 1 (ROA) and the Fixed Effects is the better estimator for Model 2 (Q). In Table 4, FGOWN (Foreign Ownership) shows negative effect of -0.02688 on ROA at significant level of 5% implying that rise in Foreign Ownership of Nigerian quoted conglomerates will lead to a decrease in 2.69% in the Return on Assets. On the other hand, a negative and insignificant effect of -0.01167 of FGOWN on Q. This means for every 1% increase in foreign ownership of Nigerian quoted conglomerates, their value of Tobin's Q will insignificantly reduce by 1.17%. The Hypothesis states that there is no significant relationship between foreign ownership of Nigerian conglomerates and firm financial performance. The results show a negative significant relationship between foreign ownership and firm performance as measured by Return on Assets suggesting a rejection of the null hypothesis. On the other hand, there is no significant relationship between foreign ownership and firm performance with Tobin's Q as a measure of firm performance. Hence, the null hypothesis is accepted with respect to Tobin's Q as a measure of firm financial performance.

Leverage as a control variable has a very high negative and significant effect of -0.22219 on ROA at 1% level of significance. This means that a 1% increase in total liabilities of a Nigerian conglomerate without a corresponding increase in Equity will lead to a decrease of 22.22% of its Return on Assets while reverse is the case of the relationship between leverage and Q in Model two. The result shows a positive and significant effect of 0.96891 of LEVERAGE on Q. This implies a 1% increase in total liabilities of a quoted Nigerian conglomerate will lead to a 96.89% increase in the value of Tobin's Q which signifies a rise in the market value of its shares. Firm Size shows a negative and insignificant effect of -0.01697 on ROA, implying that for every 1% increase in the firm size which is the natural logarithm of the total assets of a Nigerian quoted conglomerate will lead to a fall of 1.70% in its Return on Assets. The same negative and insignificant relationship is observed between Firm Size and Q. There is a -0.05747 effect of Firm Size on Q, implying a 1% rise in firm size will result in a fall of 5.75% of its Tobin's Q. This might be as a result of managers using free cash flow to embark on projects that have negative net present value on the shareholders' wealth. From the analysis of the data collected and the results of the hypothesis tested, the study found that there is a significant relationship between foreign ownership and firm financial performance using Return on Assets as a basis for measurement. However, when Tobin's Q is used to measure performance, the study found a negative insignificant relationship between foreign ownership and firm performance.

CONCLUSION AND RECOMMENDATION

Following the result of the empirical analysis of the relationship between ownership structure and firm financial performance, the following conclusion are drawn with respect to Nigerian quoted conglomerates; there is a relationship between foreign ownership and firm financial performance (measured by ROA after controlling for firm leverage and firm size).

Based on the findings of this study and the conclusion drawn therefrom, the following recommendations are deemed pertinent:

- i. Government of Nigeria and its agencies should ensure that they put policies in place that will encourage Foreign Direct Investment (FDI) and at the same time check practices of those foreign

owned companies to ensure that they are not involved in practices to repatriate profits abroad while reporting losses to avoid payment of tax.

- ii. Managers of Nigerian quoted conglomerates should ensure that they maintain optimal capital structure and avoid using company's free cash flow to invest in projects which can only benefit them and affect the company negatively. They should look for other means of increasing the assetbase of the firm and avoid using debts especially debts with higher costs.

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Effect of Investment Portfolio Selection on Investors' Wealth Maximization

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Abstract

The aim of this study is to analyze the behavior of investment portfolio and how it affects the wealth/returns of investors in Nigeria. In order to achieve this objective, the study is reduced to two null testable hypothesis, which centers on the relationship that exists between Investment Portfolio and shareholders wealth. In particular the study has evaluated how investors' wealth could rise or fall as a result of the types of investment held in the portfolio. The researcher has made use of judgmental sampling in the selection of Individual/Corporate Investors and Institutional Investors. Investors were thus categorized into two major group; 'Diversified Investment Portfolio' and 'Undiversified Investment Portfolio'. The study made use of descriptive statistics and is based on secondary and panel data model. The Hausman test was also formulated to assist in making a choice between the fixed effects and random effects approaches. The panel data, made the appropriate choice between the fixed effects and the random effects and investigates whether the regressors are correlated with the individual effect. Jarque-Bera test was employed and used to test for the normal distribution of the data. The analysis was also furnished by the value of the skewness and kurtosis of all the variables involved in the model. The Pearson Product Moment Correlation Co-efficient has also been used to test the relationship that exists between Investment Portfolio and Shareholders' Wealth. The major finding of the study is that, there is a strong and positive relationship between a well-diversified investment portfolio and Shareholders wealth. Another major finding of the study is that there is a weak and insignificant relationship between investment portfolio and investors' wealth for a Portfolio that is not properly diversified. It is also worthy to note that Investors also construct and hold portfolios majorly because of the returns that come to them to increase their wealth. It is therefore strongly recommended that investors pay particular attention to the type of investments they hold in a portfolio, as this could further increase/decrease their wealth.

Keywords: Investment, Portfolio Selection, Wealth Maximization

INTRODUCTION

A portfolio of any type involves the choice of the ways to invest some given amount of money to alternative assets in order to optimize some criteria. Portfolio Selection is a never ending issue which involves a continuous decision making progress to arrive at a portfolio, which maximizes returns for shareholders. They require maximum or adequate returns on their investments and be willing to continue to provide additional resources when needed. The stock market is a very fertile avenue for wealth creation and the interest in stock buying is obviously on the increase. The investors' wealth comprise of the combination of her assets and investments. The sum of current income and the present value of all future income inform the investors' wealth creation process. Many people have come to realize that investment is a good avenue for making their money work for them while they themselves sit relaxed on easy chairs, watching their money fetch more wealth for them (Benjamin, 1984). No matter how bright the prospects, an investor should bear in mind that to invest is to take a risk. Some of the hazards involve losing your capital, which might have been borrowed. It could be ones pension or entire life savings. Unfortunately, resources available for investments' are scarce, yet people look for where they can put their limited resources in order to get some reasonable returns as compensation for investments made. It is important to know that merely having the fund does not end the investment process. Investors should not only go for investments yielding high returns, or stocks making rounds on the Nigerian Stock Exchange as events now and then have shown that investment is not so simple but has a scientific approach to it. A wise investor can avoid the pitfalls by consulting an expert on professional grounds (Dikko, 1988).

The limitation of the investable funds available and the urge to have maximum return on it makes portfolio analysis; selection and management assume a significant place in investment appraisal. The

needs of the investor must be known before a stock can be recommended or selected. If an investor does not know what his or her investment objectives are, it does not make any difference what securities he/she buys. Many investors make bad investment decisions because they have never bothered to ask what their investment goals are. To answer that question, it is assumed that the investment goal is to maximize wealth; and maximizing wealth must be considered within the context of how much financial risk one is willing to take (Williams, 2002). "Caveat emptor" – Let the buyer beware – is an appropriate motto for investors because investing in marketable securities offers exceptional opportunities for profits as well as risks. It is an established fact that the best investment decision that an investor can make depends on the risk – return trade – off. This may not result in the greatest increase of wealth. However, a substantial amount of judgment is required to determine how much risk is acceptable for each individual. Meanwhile, the expertise available for this is scarce. So many investors and financial advisers deal loosely with the concept of risk and return, therefore resulting in the use of subjective, non – analytical criteria in making decisions and advising their clients. At best these estimates are imprecise; at worst they are completely wrong. This situation has therefore necessitated this study which investigates the effect an investment portfolio "selected scientifically or non-scientificallly" would have on investors wealth maximization objective.

Previous research has shown that many investors and financial advisers use subjective and non-analytical criteria in making decisions and advising their clients on the types of investment portfolio to keep. Regardless of how careful and informed these investors are, the future is unknown and mistakes are bound to occur when the analytical and scientific approach of portfolio analysis, selection and management are not employed. At best these estimates are imprecise; at worst they can be completely wrong. What bothers the researcher most is the nonchalant attitude investors display when selecting investment portfolios'. Little or no attention is given to the effect this will have on the maximization of their wealth. In some very rare cases where complex calculations are made in portfolio selection, the effects of such portfolios on investors' wealth maximization objective have not been given much attention to. Considering these variations, it is therefore paramount to establish a deliberate policy spelling out the effect an investment portfolio will have on investors' wealth, so that both present and prospective investors can make effective decisions during the selection process to enhance their wealth maximization objective. From the foregoing therefore, the following hypothesis are the basic ones fundamental to this study:

H₀₁: Undiversified investment portfolio has no significant impact on the wealth of Investors

H₀₂: Diversified investment portfolio has no significant impact on the wealth of Investors

LITERATURE REVIEW

The underlining theoretical basis of diversification, Capital Asset Pricing Model (CAPM), Portfolio volatility and its effect was explored by Professor Harry Markowitz in 1952. This conceptual framework was latter given the title; "Modern Portfolio Theory" (Markowitz, 1952). Before the emergence of these theories, investors knew intuitively that it was smart to diversify. Today, the field of investments is even more dynamic than it was only a decade ago. The individual has so many assets from which to choose, and the amount of information available to the investor is staggering and continually growing (Chandra, 2002). Several factors affect the construction of a Portfolio. These include the goals of the investor, the risk involved, the taxes that will be imposed on any gain and knowledge of the available opportunities and alternative investments. Investing must have a purpose for without a goal, a portfolio is like a boat without a rudder. Some objectives must guide the composition of the Portfolio (Wachowicz, 2002). It is impossible to know an asset effect on the portfolio as a whole without first knowing its characteristics. Stocks and bonds differ with respect to risk, potential return and valuation. The investor needs to know and to understand these differences as well as the relative merits and risk associated with each of the assets. After understanding how individual assets are valued, the investor may then construct a portfolio that will aid in the realization of his/her financial goals (Corrado, 2000).

The issue of managing the funds invested in fixed assets of an enterprise was considered by Germeier (1976) and Pavlov (2004). In this paper, management of an investment portfolio is considered. A financial institution creates an investment portfolio in order to obtain maximum profit from the funds invested in it. The organization can use its financial resources, as well as attract external investors. A financial organization takes advantage of the total income from the portfolio functioning. An external investor receives income in the form of dividends from his share in the portfolio, as well as interests from the invested funds. Thus, the formation of an investment portfolio, which participants are a financial organization (enterprise) and an external investor is considered. A portfolio of maximum efficiency on a basis of the portfolio theory of Markowitz (1952) is compiled. Availability of original capital to create a portfolio is considered. Investing encompasses very conservative positions as well as aggressive speculation. It is also important for those concerned with how to live after retirement. Investors who have established their overall financial plan and are now interested in managing and enhancing their wealth by investing in an optimal combination of financial assets, the idea of an optimal combination is important because our wealth which we hold in the form of various assets should be evaluated and managed as a unified whole. Wealth should also be evaluated and managed within the context of a portfolio, which is made up of the asset holdings of an investor. Almost every one owns a portfolio of investments. In this study, the term investment refers to financial assets, securities, fixed assets, current assets, other tangible assets and in particular marketable securities (bonds, stocks and so on).

Conceptual Framework

Concept of Investment

According to Encarta (2006), Investment involves, spending or setting or setting aside money for future financial gain. For an individual, investment might include the purchase of financial assets, such as stocks, bonds, mutual funds or life insurance. Investment can also be defined as the commitment of funds to one or more assets that will be held over some future time period (Jones, 1994). It can cover a wide range of activities. It often refers to investing money in certificates of deposits, bonds, common stocks and mutual funds. More knowledgeable investors could include other 'paper' assets such as warrants, bonds, stocks, futures contracts and convertible securities, as well as tangible assets such as gold, real estate and collectables. In the broadest sense, an investment is a sacrifice of current money or other resources for future benefits. Other avenues of investment available include depositing money in bank account, purchasing long term government bonds, or invest in the equity shares of a company or acquiring a piece of land.

Concept of Portfolio

A portfolio is a combination of Assets designed to serve as a store of value (Herbert, 2000). (Pandy, 1999) defines it as a bundle or a combination of individual assets or securities. The theory is based on the assumption that investors are risk averse. This implies that investors hold a well-diversified portfolio with an expectation of an expected return and the risk of the portfolio rather than individual assets or securities. Another assumption on the portfolio theory is that the returns of securities are normally distributed. This means that the expected value and variance (or standard deviation analysis is the foundation of the portfolio decisions.

Portfolio Return

The return of a Portfolio is equal to the weighted average of the returns of individual assets (or securities) in the portfolio with weight being equal to the portfolio of investment in each asset. For a two asset portfolio. Return on another hand can be represented by total dividend plus capital gain in the growth of share value (Lambe, 2021). It is being represented by $E(R) = \sum R_i P_i$

Portfolio Risk

Individual assets or securities are more risky than the portfolio. Risk is measured in terms of variance and standard deviation and risk is usually reduced when an investor is holding a portfolio of assets. However, the standard deviation and risk is usually reduced when an investor is holding a portfolio of assets. The standard deviation or variance of a portfolio is not simply the weighted average of variances (or standard deviations) of individual securities; rather the association of movement of returns of the securities affect it. Portfolio risk depends not only on the riskiness of the securities constituting the portfolio but also on the relationships among those securities (Horne, 2002). In a two asset portfolio, the covariance of two securities measures their co-movement. The variance of a two security portfolio is given by the given equation:

$$\sigma_p^2 = \sigma_x^2 W_x^2 + \sigma_y^2 W_y^2 + 2W_x W_y \sigma_x \sigma_y \text{Cov}_{xy}$$

Optimal Portfolio

A Portfolio that has the lowest level of variance (risk) is referred to as optimum portfolio. It is the best combination of security X and Y in the case of a two asset portfolio that gives rise to a minimum variance portfolio. We can use the following formulae in estimating the optimal weights of securities X and Y.

$$W_x = (\sigma_y^2 - \text{Cov}_{xy}) / (\sigma_x^2 + \sigma_y^2 - 2\text{cov}_{xy})$$

Diversification and Asset Allocation

Diversification is important for managing investment risk (Horne, 2002). But, how exactly does diversification work and how can we be sure that we have an efficiently diversified portfolio? Insightful answers can be gleaned from the modern theory of diversification and asset allocation. In this section therefore, we will examine the role of diversification and asset allocation in investing. Most people have a strong sense that diversification is important. After all, “don’t put all your eggs in one basket” is a bit of folk wisdom that seems to have stood the test of time quite well. Even so the importance of diversification has not always been well understood. This study, therefore explains why this is not the best piece of advice. Diversification has a profound effect on portfolio risk and return. The principle of diversification tells us that spreading an investment across many assets will eliminate some of the risk. Risks that can be eliminated by diversification can be called diversifiable risks. There is a minimum level of risk that cannot be eliminated by simple diversifying. This minimum level is labeled “non-diversifiable risk” (Horne, 2002).

Portfolio Analysis and Correlation

In Portfolio analysis, risky investment cannot be evaluated in terms of risk return alone. There is a third characteristic that is the relationship with other projects, which must be introduced into the analysis. The relationship between investments is called correlation coefficient. Correlation coefficient can either be positive, neutral or negative. It is positive when the returns on two investments move in the same direction, such as return to Umbrella producing company and raincoat producing company (Usman, 2005). It is neutral when there is no relationship between the two investments. It is negative when the return to the two investment move in opposite direction like return to Rain Coat Company and return to ice cream producing company. By selecting securities that have little relationship with each other, an investor is able to reduce relative risk. Thus, a project, which shows perfect negative correlation, would reduce the business risk, thus affecting investors' wealth either positively or negatively.

Individual/Corporate versus Institutional Investors

There are two broad categories of investors; Individual/Corporate Investors and Institutional Investors. The latter group consists of bank trust department, pension funds, mutual funds, insurance companies and professional money managers who are often publicized on the popular press. Institutional Investors are indeed the professional investors with vast resources at their command. Individuals/Corporate investors are the indirect beneficiaries of institutional investors because they indirectly own or benefit from these

institutions' portfolio on a daily basis. Other groups are trying to make intelligent trading decisions about securities.

Empirical Discussion

Harry Markowitz, was the first to develop portfolio diversification in a formal way. In his path-breaking article published in 1952, he showed that there is a scientific approach to diversification; he also explains that it is not enough to merely diversify, but that diversification has an analytical and scientific approach to it. To buttress his point further, he said that the adequacy of diversification is not thought by investors to depend solely on the number of different securities held. His conclusion is that it is generally more likely for firms within the same industry to do poorly at the same time than for firms in dissimilar industries. In another related paper titled, 'creating a result oriented investment portfolio', the researcher took a look at investments in general, and sought to build a platform necessary for creating a credible and sustained investment portfolio at the cheapest cost; yet with a potentially optimal return in order to yield a more profitable investment portfolio on the long run. According to the paper, the main goal of allocating assets among various asset classes is to maximize return for a chosen level of risk or stated in another way, to minimize risk given a certain expected level of return. From the various reviews made by the researcher, different scholars have been able to spell out the importance of an efficient investment portfolio. However, the effects of such portfolios on investors' wealth have not been given much attention to.

Theoretical Framework

Modern Portfolio Theory (MPT)

Markowitz (1952), stock selection position and his Modern Portfolio Theory (MPT) continues to be a popular investment strategy, and this portfolio management tool—if used correctly—can result in a diverse, profitable investment portfolio. The study adopts the theory of hypothesis testing of both diversified and undiversified investment portfolio to underpin its effect on wealth generated by investors. This is in line with the Harry Markowitz's Modern Portfolio Theory which states that there is no such thing as the perfect investment, but crafting a strategy that offers high returns and relatively low risk is priority for modern investors. While this hallmark seems rather straightforward today, this strategy actually didn't exist until the latter half of the 20th century. As the philosophical antithesis of traditional. Instead of focusing on the risk of each individual asset, **Markowitz** demonstrated that a diversified portfolio is less volatile than the total sum of its individual parts. While each asset itself might be quite volatile, the volatility of the entire portfolio can be quite low.

METHODOLOGY

This study examines the effect investment portfolios have on investors' wealth. Investment portfolios were further categorised into diversified and undiversified portfolios while the significance of diversification or non-diversification was measured on wealth. Attention was paid particularly to corporate organisations quoted on the Nigerian Stock Exchange to ensure that the data collected is comprehensive and authentic. Data gathered was sourced from annual financial reports and audited statements of institutions. The Population of this study is on the different types of investors currently investing in Nigeria. However, the undiversified investment portfolio was taken from the financial sector of the economy and concentrated solely on the banks. Five Nigerian banks were studied such as the Guaranty Trust Bank, United Bank of Africa, First Bank of Nigeria, Access Bank Nigeria Plc, and Zenith Bank. On the other hand the sample size for the diversified portfolio was taken from different sectors in the economy including the financial sector. This is made up of the Guaranty Trust Bank, Dangote Cement plc, Nestle Nigeria Plc, Vita Foam Nigeria Ltd and Ooando Nigeria Plc. The financial statements of the above listed was explored using equity and earnings of financial years 2011 – 2020 to represent investment portfolios and wealth.

The study made use of descriptive statistics and is based on secondary and panel data model. This was used because the time series effect was to be established. The Hausman test was also formulated to assist in making a choice between the fixed effects and random effects approaches. The panel data, made the appropriate choice between the fixed effects and the random effects and investigates whether the regressors are correlated with the individual effect. Jarque-Bera test was employed and used to test for the

normal distribution of the data. The analysis was also furnished by the value of the skewness and kurtosis of all the variables involved in the model. In order to determine inter-relationships among variables, correlation matrix of the variables was conducted. In testing the strength of this inter-relationship, the Product Moment Pearson Correlation Coefficient(r) was utilized.

Panel data model used is as described below:

$$Y_{it} = \beta_0 + \beta_i X_{it} + \varepsilon_{it} \text{-----} (1)$$

Where:

Y= dependent variable

X= all the independent variables

β_0 = the constant term

β_i = slope/coefficient of the independent variable

ε = error term

$i = (1, 2, 3, 4, 5)$ – number of Banks

$t = (1, 2, 3, 4, 5 \dots 10)$ – number of years

ix $t = (5*10)$

Incorporating the variables into the panel regression model framework that would enable the testing of hypotheses, we have:

Undiversified Model

$$RET = \alpha_{0it} + \alpha_{1it} INV + \mu_{it} \text{-----} (2)$$

Diversified Model

$$RET = \beta_{0it} + \beta_{1it} INV + \varepsilon_{it} \text{-----} (3)$$

Where:

RET = Returns

INV = Investments

α_{0it} = Intercept of undiversified portfolio

α_{1it} = Intercept of diversified portfolio

β_{0it} = Intercept of undiversified portfolio

β_{1it} = Intercept of undiversified portfolio

μ_{it} = Error term (from diversified model)

ε_{it} = Error term (from diversified model)

RESULT AND DISCUSSION

The study adopted panel least square estimates for the analysis. The panel least squares estimation technique is a modified Ordinary Least Squares (OLS) technique with common constant, fixed and random effects as variants. The study however first examined the correlation and descriptive statistics of the series to show basic characteristics within the series. In order to have glimpse of the data used in the study, a first pass at the data in form of descriptive statistics was carried out. This gives us a good idea of the patterns in the data used for the analysis.

Correlation Analysis

In order to determine inter-relationships among variables, correlation matrix of the variables was conducted. In testing the strength of this inter-relationship, the Product Moment Pearson Correlation Coefficient(r) was utilised. The sign of the correlation coefficient indicates the direction of the association and the magnitude of the correlation coefficient indicates the strength of the association. The closer the correlation coefficient value is to one, the

stronger the correlation (0.50 to 0.99) and the closer the correlation coefficient is to zero, the weaker (0.01 to 0.49) the correlation.

Table 1: Correlation Matrix

| | Undiversified Model | | Diversified Model | |
|-----|---------------------|-----|-------------------|-----|
| | RET | INV | RET | INV |
| RET | 1 | | 1 | |
| INV | 0.137946 | 1 | 0.912616 | 1 |

Source: Authors Computation, 2021 (Eviews-10)

The results in Table 2 indicate that a positive and weak correlation exists between undiversified portfolio investment and bank returns. This relationship was captured by the coefficient value of 0.137946. However, a positive and strong correlation was found to exist between diversified portfolio investment and returns. This was captured by the correlation coefficient value of 0.912616 among the two variables of interest.

Descriptive Statistics Results

The summary statistics is presented in Table 2

Table 2: Descriptive Statistics Results

| | Undiversified Model | | Diversified Model | |
|--------------|---------------------|---------------|-------------------|---------------|
| | RET | INV | RET | INV |
| Mean | 894000000000' | 382000000000 | 446000000000 | 174000000000 |
| Std. Dev. | 1580000000000 | 2720000000000 | 924000000000 | 2850000000000 |
| Skewness | 3.937072 | 0.265428 | 1.683768 | 1.662895 |
| Kurtosis | 18.40882 | 2.677787 | 6.320801 | 4.376855 |
| Jarque-Bera | 623.8203 | 0.803395 | 44.73602 | 25.9132 |
| Probability | 0.000000 | 0.669183 | 0.000000 | 0.000002 |
| Observations | 50 | 50 | 48 | 48 |

Source: Authors Computation, 2021 (Eviews-10)

From the descriptive statistics results in Table 2, it could be observed that the mean value for returns for undiversified banks was quite higher than that of the diversified banks as captured by their mean values of 894 billion and 446 billion respectively. More so, the mean value of undiversified investment portfolio was found to be higher than that of the diversified investment portfolios which has a mean value of 382 billion and 174 billion respectively. The analysis was also furnished by the value of the skewness and kurtosis of all the variables involved in the model. All the variables were found to be positively skewed; and showed that they all tailed to the right-hand side of the normal distribution. Variables with value of kurtosis less than three are called platykurtic (fat or short-tailed), and only undiversified investment portfolio variable qualified for this during the study period. On the other hand, variables whose kurtosis value is greater than three are called leptokurtic (slim or long tailed) and undiversified bank returns, diversified bank returns and diversified investment portfolio variables qualified for this during the study period. Jarque-Bera test which was used to test for the normal distribution of the data showed that only undiversified portfolio investment variable is normally distributed; while the rest shows that they are not normally distributed as their probability values were found to be less than 5%. This thus revealed that on the average, the data sets are not normally distributed.

Hausman Test

The Hausman test is formulated to assist in making a choice between the fixed effects and random effects approaches. For the panel data, the appropriate choice between the fixed effects and the random effects methods involves investigating whether the regressors are correlated with the individual (unobserved in most cases) effect. The Hausman statistic may be viewed as a distance measure between the fixed effects and the random effects estimators. Thus, we actually test:

H_0 : Random effects are consistent and efficient, versus;

H_1 : Random effects are inconsistent (as the fixed effects will be always consistent).

The result of the Hausman Tests result are presented in Table 3 below:

Table 3: Hausman Test Results

| Correlated Random Effects - Hausman Test | | | | | |
|--|----------------------|-------------------|--------------|--------|---------------|
| Models | Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. | Decision |
| Undiversified Model | Cross-section random | 4.571731 | 1 | 0.0325 | Fixed Effect |
| Diversified Model | Cross-section random | 0.000234 | 1 | 0.9878 | Random Effect |

Source: Authors Computation, 2021 (Eviews-10)

Undiversified Model: From Table 3, the Hausman diagnostic test showed that the null hypothesis was rejected at 5% significant level as the probability value of 0.0325 was found to be less than 0.05. Thus, there is a significant uncorrelated fixed effect in the model. Hence, we conclude that the fixed effect model significantly performs better than the random effect. In view of this, the study adopts the results from the fixed effect model as basis to interpret the relationship between the dependent variable and independent variables in Undiversified Model.

Diversified Model: In the result shown in Table 3, the Hausman Test revealed a Chi-square statistic of about 0.000234, with a probability value of 0.9878 which is greater than 0.05. This provides a strong argument for the alternative hypothesis that there is no misspecification when random effect model is employed and thus provides the justification for the acceptance of the random effect estimates. The implication of this result is that the random effects model will not be biased and inconsistent for Diversified Model.

Statistical Test of Hypotheses

Here, the two formulated null hypotheses for the study were tested. In testing the hypotheses which partly satisfies the objective of this study, the study adopts 5% level of significance and conclusion was however taken based on the probability values (PV). If the PV is less than 5% or 0.05 (that is $PV < 0.05$), it implies that the variable in question is statistically significant at 5% level; otherwise, it is not significant at that level.

Test of Hypothesis One:

H_{01} : Undiversified investment portfolio has no significant impact on returns banks

Table 4: Fixed Effect Model

Dependent Variable: RET

Method: Panel Least Squares

Date: 06/16/21 Time: 11:49

Sample: 2011 2020

Periods included: 10

Cross-sections included: 5

Total panel (balanced) observations: 50

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---------------------------------------|-------------|--------------------|-------------|--------|
| C | 1.62E+11 | 4.31E+10 | 3.761605 | 0.0005 |
| INV | -0.190905 | 0.102346 | -1.865287 | 0.0688 |
| Effects Specification | | | | |
| Cross-section fixed (dummy variables) | | | | |
| R-squared | 0.395605 | Mean dependent var | 8.94E+10 | |
| Adjusted R-squared | 0.326924 | S.D. dependent var | 1.58E+11 | |

| | | | |
|--------------------|-----------|-----------------------|----------|
| S.E. of regression | 1.29E+11 | Akaike info criterion | 54.12356 |
| Sum squared resid | 7.38E+23 | Schwarz criterion | 54.35300 |
| Log likelihood | -1347.089 | Hannan-Quinn criter. | 54.21093 |
| F-statistic | 5.760026 | Durbin-Watson stat | 1.816910 |
| Prob(F-statistic) | 0.000358 | | |

Source: Authors Computation, 2021 (Eviews-10)

Hypothesis One:

From the random effect regression result in Table 4, it was observed that the calculated t-value for undiversified investment portfolio and returns of banks in Nigeria is -1.865287 and with an associated p-value of 0.0688. Since the p-value is greater than 0.05 ($0.0688 > 0.05$), it thus falls in the acceptance region and hence, we accept the first null hypothesis (**H₀₁**). The conclusion here is that undiversified investment portfolio has no significant impact on returns of banks.

Summary Statistics

Using the f-statistic, the study sought to investigate the fixed effect regression model whether it was valid or not. The F statistics was used to determine the model validity. The study found out that the model was valid $F = 5.760026$, $PV = 0.000358$. Therefore, this implies that the model has overall statistical significance. The study also sought to determine the model's goodness of fit statistics. The coefficient of determination as measured by the (R-square: 39.56) shows that undiversified investment portfolio explains 39.56 percent of the total variation in bank returns. This implies that the stochastic disturbance error term (ϵ) covers 60.44%. Durbin-Watson was used to test for the presence of serial correlation or autocorrelation among the error terms. The model also indicates that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.8169 (as the acceptable Durbin – Watson range is between 1.50 and 2.40). This shows that the estimates are unbiased and can be relied upon for quality and sound investment and managerial decisions.

Test of Hypothesis Two:

H₀₂: Diversified investment has no significant impact on returns of banks

Table 5: Random Effect Model

Dependent Variable: RET
 Method: Panel EGLS (Cross-section random effects)
 Date: 06/16/21 Time: 12:11
 Sample: 2011 2020
 Periods included: 10
 Cross-sections included: 5
 Total panel (unbalanced) observations: 48
 Swamy and Arora estimator of component variances

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------------------|-------------|--------------------|-------------|--------|
| C | -8.97E+09 | 1.56E+10 | -0.573687 | 0.5690 |
| INV | 0.296188 | 0.033383 | 8.872501 | 0.0000 |
| Effects Specification | | | | |
| | | | S.D. | Rho |
| Cross-section random | | | 3.10E+10 | 0.5209 |
| Idiosyncratic random | | | 2.98E+10 | 0.4791 |
| Weighted Statistics | | | | |
| R-squared | 0.634563 | Mean dependent var | 1.29E+10 | |

| | | | |
|--------------------|----------|--------------------|----------|
| Adjusted R-squared | 0.626619 | S.D. dependent var | 4.83E+10 |
| S.E. of regression | 2.95E+10 | Sum squared resid | 4.01E+22 |
| F-statistic | 79.87675 | Durbin-Watson stat | 2.173514 |
| Prob(F-statistic) | 0.000000 | | |

Unweighted Statistics

| | | | |
|-------------------|----------|--------------------|----------|
| R-squared | 0.832408 | Mean dependent var | 4.46E+10 |
| Sum squared resid | 6.73E+22 | Durbin-Watson stat | 1.596330 |

Source: Authors Computation, 2021 (Eviews-10)

Hypothesis Two

Table 5 indicated that diversified investment portfolio has a significant influence on returns of banks as captured by the t-value of 8.872501 and its associated PV of 0.0000 which was found to be greater than 0.05. Therefore, the study rejects the second null hypothesis (H02) and conclude that diversified investment portfolio has significant impact on returns of banks.

Summary Statistics

The F-statistic which captures the overall significance of the model showed that the random effect model is fit in prediction. This was captured by the F-statistic value of 79.87675, with an associated p-value of: 0.0000. The coefficient of determination (R-square), which was used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction. It showed that 63.45 percent changes in returns was due to diversified investment portfolio, while 36.55 percent unaccounted variation was captured by the error term. The model also indicates that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.5963. This shows that the estimates are unbiased and can be relied upon also for policy decisions.

CONCLUSION AND RECOMMENDATIONS

Portfolio theory is both a theory of diversification and efficiency. As a theory of diversification, it is concerned with combining a number of assets into a portfolio, to achieve some degree of income stabilization without impairing expected return. As a theory of diversification, it is concerned with combining a number of assets into a portfolio, to achieve some degree of income stabilization without impairing expected return. As a theory of efficiency, it seeks to select for an investor, a portfolio that offers the highest return for a given level of risk; or the lowest level of risk for a given return. Portfolio investment selection is therefore concerned with the achievement of efficiency in an investors' risk-return position through a careful planned policy of diversification. Findings from the study showed that undiversified investment portfolio has a negative and insignificant impact on returns of banks. The implication of this findings is that, an undiversified bank poses a serious threat to banks returns and as such diminishes returns recorded from undiversified investments. However, it was discovered from the analysis that diversified investment portfolio has a positive and significant impact on returns of investors. The implication of this findings is that as investment are been diversified, higher significant returns are recorded by the banks involved.

From the findings outlined above, the conclusions drawn are that; there is a positive relationship between an investment portfolio and investors wealth. Therefore any increase on investment will yield a corresponding increment on investors' wealth. In addition to that, diversification into various investments improves the wealth maximisation objective of portfolio holders. Dividends/Interest/Earnings inform the purchase of securities. Investors therefore invest in such a way as to maximise returns/wealth/satisfaction from their resources. The relationship between wealth and returns is positive since investors derive greater satisfaction from a larger rather than a smaller rate of return. The Nigerian investor depends more on hunches (intuitive feelings) rather than on scientific collation, analysis and study of factual information and data for security management. Since it has been clearly stated from the research conducted above, that a well-diversified investment portfolio has a positive significant effect on investors'

wealth, investors should ensure that they get all information necessary to enable them arrive at efficient portfolios in order to obtain maximum returns.

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Dividend Policy and Financial Performance of Deposit Money Banks in Nigeria

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Abstract

The purpose of this study was to examine the relationship between dividend policy and financial performance of deposit money banks in Nigeria. To achieve this, a review of extant theoretical and empirical literature was made and the study is anchored on the signaling theory. The longitudinal survey research design was adopted in this study and data were obtained from the Financial Statements and Annual Reports of eighteen (18) Deposit Money Banks in Nigeria for the period of 2015 – 2019. The data generated for this study were analysed with both descriptive and inferential statistics using the arithmetic mean, standard deviation, minimum and maximum values, and the Auto-Regressive Distributed Lag (ARDL) regression technique. These were computed with the aid of E-Views version 10. The findings of the study revealed that the effect of dividend policy on financial performance of deposit money banks in Nigeria is mixed. While dividend pay-out ratio has a negative significant relationship with financial performance (return on equity), dividend yield does not significantly affect financial performance (return on equity) of deposit money banks in Nigeria. Based on the above findings and the conclusion drawn there from the following recommendations are made: management of deposit money banks should have a good and robust dividend policy in place to determine the percentage of dividend pay-out that would enhance financial performance in term of return on equity; management of deposit money banks should invest more effort to increase dividend yield and improve its impact on financial performance (return on equity) of deposit money banks in Nigeria.

Keywords: Dividend Policy, Financial Performance, Earnings per share, Banks, Descriptive and Inferential Statistics

INTRODUCTION

Banks exist not only to accept deposits but also to grant credit facilities. Their intermediation role can be said to be a catalyst for economic growth, hence efficient and effective financial performance of the banking industry over time is an index of financial stability and economic development of any Nation. According to Demsetz and Lehn (1985), financial performance refers to measures used to verify the extent to which resources of the firm are adequately utilized to create an acceptable financial stand. The extent to which a bank performs these functions to the public for productive activities accelerates the pace of a nation's economic growth and its long-term sustainability. A sound financial system is critical to economic growth for any country, and a healthy banking system is a key component of this (Akimade, 2016). During the last global recession in 2008, the banking system was the central protagonist and arguably suffered the most. As many as 465 banks closed in the United States between 2008 and 2012. Likewise, Nigerian banks suffered following the 2016 recession, ultimately leading to the failure of many banks while many others opted for mergers and acquisition (Akimade, 2016). More so, the outbreak of covid-19 pandemic has impacted negatively on the Nigerian banking sector by slowing revenues and increasing loan loss provisions. Revenues, such as fee income from the first half of the year 2020, have declined by 6% compared with the third quarter of 2019 and provision for loan losses have gone up by 200% relative to 2019.

Various efforts have been made by regulators, policy makers, financial experts and professionals, scholars and researchers to boost the performance of Nigerian banks. Researchers are of the opinion that dividend policy of banks could help boost their performance and accelerate economic growth and development of the country. Amidu and Abor (2006) claim that dividend represents a distribution of earnings to the shareholders of a company, and it is the responsibility of the financial manager to ensure that equity and fairness prevails in the apportionment of any benefit to the various shareholders. Dividends are cash

payments which are made to the shareholders against their investment in the business. These dividends can take the shape of cash dividends as well as stock dividends, depending on the firm policy. Dividend decision is one of the financial management decisions of a firm, and it is concerned about whether to retain dividend or pay out dividend to shareholders, and if dividend is to be retained, how much? (Monogbe & Ibrahim 2015). According to Chandra (2002) dividend policy refers to managerial statement that determines the proportion of earning paid to shareholders by way of dividends and what proportion is ploughed back in the firm for reinvestment purpose. Lasher (2000) defined dividend policy as the rationale under which a firm determines what it will pay in dividends. It encompasses both the amount paid and the pattern under which changes in amount occur over time. That is, it entails striking a balance between future growth and payment of current dividends to a firm's shareholders. As noted by Ross et al. (2002) companies view the dividend decision as quite important because it determines what funds flow to investors and what funds are retained by the firm for investment. Dividend policy provides information to stakeholders concerning the company's performance. It also entails striking a balance between future growth of the firm and payment of current dividend to firm's shareholders. The ability of a bank to pay dividends will depend to a large extent on its financial performance.

The subject matter of dividend policy remains one of the most controversial issues in corporate finance. For more than half a century, financial experts have engaged in modeling and examining corporate dividend policy. Black (1976) hinted that, "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don't fit together". The patterns of corporate dividend policies not only vary over time but also across countries, especially between developed, developing and emerging capital markets. Over the years, there has been an emergence of different schools of thought in explaining the importance of dividend payout on future financial performance of firms. Miller and Modigliani (1960) affirms that high dividends increases firm value since there exists natural shareholder for dividend paying stocks and hence many investors invest in stocks to maintain a steady source of cash. One school of thought argues that, if it is cheaper paying dividends in comparison to letting the investors earn benefit in terms of cash by selling shares, then the natural clientele would be willing to pay a premium for the stock and this therefore means that the firm value goes high. On the other hand, there exist a narrative that low dividends will increase value of a firm mainly because dividend income is often taxed, which is severely ignored by the study by Modigliani and Miller. This is also explained by the argument that paying out large dividends crowds out a firm's pool of funds to reinvest for growth. Firms could convert dividends into capital gains by slightly adjusting or changing their dividend payment policies. There exist prior empirical studies that link dividend policy to financial performance. Idewe and Murad (2019) found that a positive and significant relationship exists between dividend payout ratio and financial performance but a negative and insignificant relationship between dividend yield and financial performance. More so, Amidu and Abor (2006) show that dividend policy influences firm performance measured by its profitability. However, Velamampy et al. (2014) discovered that determinants of dividend policy are not correlated to the firm performance measures of the organization. Results show that dividend policies do not affect companies return on equity and return on assets. Farsio et al (2004) revealed a negative relationship between dividend payout and future earnings (financial performance). These findings are mixed and therefore require further investigation.

Moreover, the available empirical studies on the relationship between dividend policy and financial performance differ from the present study in the operationalization of variables, the methodology adopted, and the scope of the study. For example, Idewe and Murad (2019)'s study covers the period of 2009-2014, thereby creating a gap for a more current study. An attempt to provide an empirical evidence to support the above argument, close the existing gaps in prior studies, and expand the frontier of knowledge in this area of study, is of course the reason for this present research work that tends to investigate the relationship between dividend policy and firm's performance of deposit money banks in Nigeria. The basic hypothesis underlying this study includes:

H₀₁: Dividend payout ratio does not significantly affect Return on Equity of Deposit Money Banks in Nigeria.

H₀₂: Dividend yield does not significantly affect Return on Equity of Deposit Money Banks in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Dividend Policy

Bannock (1998) noted that a dividend is expressed as a percentage of the nominal value of a share or an absolute amount per share. Richard and Stewart (2003) noted the direct compensation and servicing of share capital involved in dividend paid to shareholders, adding that dividend policy is a trade-off between retained earnings and paying out cash as well as issuing new shares. Where there is no cash, a scrip issue or bonus share is given. According to Akimade (2016), dividend policy is the decision arrived by participants involved in the dividend decision process on how and when the amount or percentage will be allocated to shareholders as returns on their equity investment and the portion reserved for precautionary, speculative or transactionary motives. Companies understand that most shareholders have a desire to receive dividends. However, company's decision regarding what to pay as dividend depends on a number of factors. These factors as proposed by Akinsulire (2006) are:

Legal requirement: Company law allow the payment of dividend only out of distributable profits that is; profits arising from the use of the company's property, even though it is a wasting asset; revenue reserves; realized profit on a fixed asset sold, but where more than one asset is sold, the net realized profit on the assets sold; calculated on conventional accounting principles. It is forbidden to distribute dividend out of capital (Section 379 –382 of CAMA).

Government regulation: Government, through some guidelines restricts the amount of dividend payable to shareholders by restricting dividend payment to a certain percentage of the profit after taxation. However, from 1988, dividend payment has been deregulated.

Statutory requirement: Some companies are required to transfer a given percentage of profit before tax (PBT)/profit after tax (PAT) to statutory reserves. For example, insurance companies; Life –10% of PBT or 1% of total premium whichever is higher; Nonlife –20% of PBT or 3% of total premium whichever is higher. Banks; 30% of PAT if statutory reserve is less than minimum paid up capital, 15% of PAT if statutory reserve is less than minimum paid up capital, 10% of PBT to SME reserve.

Liquidity consideration: Regardless of other considerations, a company will be unable to pay a dividend if cash is not available to do so. It may however, sometimes borrow for example, by bank overdraft, for this purpose.

Share valuation: It has become part of the stock market that investors favour a company if its dividends are basically stable over time. A gentle upward movement is to be desired but violent fluctuations in either direction are not. These factors often lead many companies to adopt a very cautious dividend policy.

Internal re-investment opportunities: If external finance is not available or only available by incurring significant transaction costs, then the payment of dividends may mean foregoing worthwhile investment opportunities. Dividend may have to be restricted to provide financing for such investments.

Access to capital market: A company can raise new debt or equity from the capital market if it is not liquid enough to pay its dividend. The greater companies access to capital market, the greater its ability to pay dividend.

Dividend Payout Policy

Dividend payout among listed firms is guided by dividend policy which is the decision making strategy aiding in deciding the amount of dividends and the timing of the payments. It is said to be an important financial decision that corporate managers encounter (Baker & Powell, 1999). A study conducted by

Zhou and Roland (2005) revealed that high dividend payout firms tend to send a message of higher future profitability but relatively low past earnings growth. When making a decision as to which dividend policy to use, a firm may adopt either of four main dividend policies explained below which are based on various factors that frame a dividend policy of a firm; How available are investment opportunities, predicted earnings changes, tax regimes, flexibility of a firm's financial status, restrictions from a legal perspective and floatation costs are among the factors that affect a company's dividend policy. One of the various dividend policies used is the Stable Dividend Policy; in this case a firm aims at having a balanced dividend payout every year. The payout of dividend rarely does it change even at the times when earnings are volatile every year.

Dividend Yield

The dividend yield, expressed as a percentage, is a financial ratio (dividend/price) that shows how much a company pays out in dividends each year relative to its stock price. The reciprocal of the dividend yield is the price/dividend ratio. It is used to calculate the earning on investment (shares) considering only the returns in the form of total dividends declared by the company during the year. Historically, a higher dividend yield has been considered to be desirable among many investors. A high dividend yield can be considered to be evidence that a stock is underpriced or that the company has fallen on hard times and future dividends will not be as high as previous ones. Similarly a low dividend yield can be considered evidence that the stock is overpriced or that future dividends might be higher. Some investors may find a higher dividend yield attractive, for instance as an aid to marketing a fund to retail investors, or maybe because they cannot get their hands on the capital, which may be tied up in a trust arrangement. In contrast some investors may find a higher dividend yield unattractive, perhaps because it increases their tax bill. Dividend yield fell out of favor somewhat during the 1990s because of an increasing emphasis on price appreciation over dividends as the main form of return on investments. The importance of the dividend yield in determining investment strength is still a debated topic; most recently, Foye and Valentincic (2017) suggest that high dividend yield stocks tend to outperform low dividend yield stocks.

Financial Performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues and expand its operations (Copisarow, 2000). Financial performance can be measured in many different ways, but all these ways should be aggregated. Revenue from operations, operating income or cash flow from operations can be used as well as total unit sales. According to Demsetz and Lehn (1985), financial ratios from financial statements are a good source of data to measure financial performance. Liquidity is one of the most outstanding financial ratios used as a measure of the firm's ability to meet financial obligations as and when they fall due without disrupting the normal business operations. Liquidity can be analysed both structurally and operationally. Financial performance can also be measured in terms of net earnings which are divided into two parts, that is, retained earnings and dividends. The retained earnings of the business may be reinvested and treated as a source of long-term funds. The dividend should be distributed to the shareholders in order to maximize their wealth as they have invested their money in the expectation of being made better off financially.

Return on Equity

Return on equity (ROE) or also called by Return On Common Equity, is often translated as Rentability of Own Capital. Investor to buy the shares will be attracted to this profitability ratio, or part of total profitability that can be allocated to shareholders. As known, shareholders have residual claim on obtained profits. Profit obtained by the company firstly will be used to pay any interest of debts, then preference share, and then (if any) will be given to shareholders. Return on equity (ROE) is the profitability ratio to measure the company ability to generate profit based on share capital owned by the company. Return on equity (ROE) can be calculated as Net Income after tax divided by Total Equity

Empirical Literature

Santosa, Aprilia and Tambunan (2020) examine the relationship between financial performance and firm value with dividend policy as an intervening variable in an emerging market, Indonesia. The samples in this study are large firms listed on the Indonesia Stock Exchange (IDX). The sampling method uses a purposive sampling technique according to research criteria, especially members of the LQ45 index. The study used the data analysis by using multiple regression analysis, path analysis, and Sobel test to find the direct, indirect, and intervening effect and significance in this study. The results indicated that profitability and activity have a positive effect, leverage has a negative effect, but liquidity has no effect on the value of the firms. The subsequent analysis shows that profitability and leverage do not affect dividend policy, liquidity has a negative effect, while activity has a positive effect, significantly. Dividend policy has a positive effect on firm value. Liquidity and leverage do not affect the firm value, but profitability and activity effect positively on the firm value through intervening dividend policy. In general, financial performance indicates an influence on firm value and less effect on dividend policy. As an intervening variable, dividend policy weakens the effect of financial performance on firm value. Ideweke and Murad (2019) investigates the relationship between financial performance and dividend policy for a sample of fifteen Deposit Money Banks quoted on the Nigeria Stock Exchange 2009 to 2014. Panel data regression analysis was used as the method of analysis, and the model was estimated using the Pooled Least Squares estimation technique. The study revealed that there is a positive and significant relationship between dividend payout ratio and financial performance. On the contrary, there is a negative and insignificant relationship between dividend yield and financial performance.

Monogbe and Ibrahim (2019) conducted a study is to ascertaining the relationship between dividend policy and corporate profitability, Investment and Earning per Shares. Data for the study were extracted from annual report and accounts of twenty five quoted companies in Nigeria. These data were subjected to regression analysis, using Eview software and the findings indicate that; there is a positive and significant association between the firm performance and dividend policy of the sampled firm. The study further shows that there is a strong and positive significant relationship between ROCE, ASSET and dividend policy. Rahan and Wali (2018) investigate that whether the dividend policy makes an impact on the firm performance in Pakistan especially in cement sector. Data used have been collected from annual reports of the sample companies and website of Pakistan Stock Exchange from 2012 to 2016. The results of OLS indicate that there is an insignificant positive relationship between return on equity (ROE) and Dividend per share (D.P.S) which imply that by increasing cost dividend per share, return on equity increases for the selected companies. Furthermore, a significant positive relationship between earning per share (EPS) and return-on-equity (R.O.E) was found. In the case of firm size, significant relationship was found with ROE and financial leverage showed an insignificant relationship with firm performance (R.O.E). Hence this study supports the relevant theories of dividend policy. Enekwe, Nweze and Agu (2015) in a study on the effect of dividend pay-out ratio on the profitability of quoted cement companies in Nigeria, affirm that dividend payout ratio (D.P.R) has positive relationship and dividend payout ratio (D.P.R) has statistically significant with Return on Asset (R.O.A) and Return on Capital Employed (ROCE) while DPR has statistically insignificant with Return on Equity (ROE) of quoted cement companies in Nigeria. Kajola et al.(2015) did a work on „dividend payout policy and firm financial performance: evidence from Nigerian listed non-financial firms““. This work analyzed twenty-five non-financial firms listed on the Nigerian Stock Exchange from the period of 2004 to 2013. Panel data methodology was employed and pooled Ordinary Least Square (OLS) was used to estimate the coefficients of explanatory and control variable. The return on asset (ROA) served as a surrogate for the dependent variable, profitability, while Dividend Pay-out ratio proxied for dividend policy and was the only explanatory variable. Control variables include firm size, asset tangibility and leverage. Regression result reveals a positive and significant relationship between dividend payout policy (DPO) and financial performance (ROA).

Velnampy et al. (2014) did a research work on dividend policy and firm performance with evidence from the manufacturing companies listed on the Colombo Stock Exchange. The drive for this research was to

find out the correlation between dividend policy and firm performance of listed manufacturing companies in Sri Lanka. The analysis was for a period of 5 years, 2008 to 2012. Here, dividend payout and earnings per share were used as measures of dividend policy while, returns on equity and returns on assets were used as determinants of firm performance. Correlation, regression and descriptive statistics were used to test these variables. After the analyses were run, it was discovered that determinants of dividend policy are not correlated to the firm performance measures of the organization. Regression model showed that dividend policies do not affect companies' ROE and ROA. Gulet al. (2012) did a work on the relationship between dividend policy and shareholders' wealth in Pakistan. They studied the impact of dividend policy on shareholder's wealth, which was the general objective. The specific objectives were; to examine the relationship between wealth of shareholders and dividend payout; the impact of variation in dividend policy on the wealth of shareholders of dividend-paying and non-paying companies and; examine the impact of retained earnings and past performance in the existence of dividend policy on wealth of shareholder's. Seventy-five (75) companies listed in "Karachi Stock Exchange", were used as sample size for this study for duration of six years, from 2005 to 2010 using multiple regression and stepwise regression. Shareholder's wealth was used as the dependent variable, which was measured as market price per share, whereas, the explanatory variable dividend policy is measured as dividend per share. Furthermore, Lagged Price earnings ratio, Retained Earnings and Lagged Market Value of equity were used as explanatory variables. Data was collected from company's annual reports, Karachi Stock Market and State Bank of Pakistan. The findings in this research work were that the difference in average market value (AMV) relative to book value of equity (BVE) is highly significant between dividend-paying companies and non-paying companies. Retained earnings have insignificant influence on market value of equity.

Anijesushola and Jimoh (2012) investigated the link between the financial performance and dividend payout among listed firms' in Nigeria. The elements used were size of firms, ownership structure and the dividend payouts. The period 2004-2009 was utilized as the main sources of data collection for the fifty selected firms. The study found out that there is a significant positive interrelationship between the dividend payout and the performances of firms of the sampled firms in Nigeria. The study exhibited that ownership structure and firm's size has a significant impact of the dividend payout of firms too. Those dividends in Poland have less of a signaling role than in the developed capital markets. Mohammed (2007) examines whether dividend policy influences firm performance in Ghana. The analyses are performed using data derived from the financial statements of listed firms on the GSE during the most recent eight-year period. Ordinary Least Squares model is used to estimate the regression equation. In order to operationalise 'dividend policy'; the study coded: '1' to represent the company has a policy to pay dividend; while '0' to represent the company has a policy not to pay dividends. The results show positive relationships between return on assets, dividend policy, and growth in sales. Surprisingly, study reveals that bigger firms on the GSE perform less with respect to return on assets. The results also reveal negative associations between return on assets and dividend payout ratio, and leverage. The results of the study generally support previous empirical studies. The main value of this study is the identification of how dividend policy affects performance of firms listed on the Ghana Stock exchange. Farsioet al.(2004) argued that no significant relationship exist between dividends and earnings in the long run and studies that support this relationship are based on short periods and therefore misleading to investors. They proposed three circumstances that would render the long-term correlation of dividends and future earnings irrelevant. First, they pointed out that an increase in dividends may lead to a decline in funds that are to be reinvested by the firm. Firms that pay high dividends without considering investment needs may therefore experience lower future earnings. There is thus a negative relationship between dividend payout and future earnings (financial performance).

Theoretical Framework

There are many theories relating to dividend policy and firm performance, such as dividend irrelevance theory, bird in the hand theory, agency theory, and signaling theory. This study is however anchored on the signaling theory, which states that dividend policy would be considered as a mechanism to transfer

information about a company's future expectation to the investors. Paying dividend in cash gives valuable information to the stockholders as they don't have much information regarding the future earnings of the company as compared to the management. This practice reduces information asymmetry. Therefore, investors can use this information to estimate the share value of a company. According to the information content of dividends or signaling theory, firms, despite the distortion of investment decisions to capital gains, may pay dividends to signal their future prospects. The intuition underlying this argument is based on the information asymmetry between managers (insiders) and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders. Here, managers are thought to have the incentive to communicate this information to the market. Miller and Rock (1985) argued that information asymmetries between firms and outside shareholders may induce a signaling role for dividends. They show that dividend payments communicate private information in a fully revealing manner. The most important element in their theory is that firms have to pay out funds regularly. An announcement of dividends increase is taken as good news and accordingly the share price reacts favourably and vice-versa. Only good-quality firms can send signals to the market through dividends and poor-quality firms cannot mimic these because of the dissipative signaling cost (for e.g. transaction cost of external financing, or tax penalty on dividends, distortion of investment decisions). Therefore, a similar reasoning applies to recurrent share buy-backs.

METHODOLOGY

In this study, the dependent variable (financial performance) was measured as return on equity (ROE) while the dimensions used for the independent variable (dividend policy) are dividend payout ratio and dividend yield. The data for these variables were obtained from the annual report and financial statements of eighteen (18) deposit money banks in Nigeria for the period of 2016 – 2019, thereby qualifying the study as a panel data study. This therefore necessitated the use of the longitudinal survey research design in the study. In view of the fact that most panel data like time series data are not stationary, using non-stationary data in the model might lead to spurious regression which cannot be used for precise prediction (Gujarati, 2003). Thus, the prerequisite for co-integration test is the stationarity of each individual panel data over. Therefore, before turning to the analysis of the long-run relationships between the variables, the study examined the unit root properties of each panel data, as non-stationary behaviour is a prerequisite for including them in the co-integration analysis. If the panel data are stationary in their levels, then they are said to be integrated of order zero, i.e., I (0); if they are stationary in their first differences, then they are said to be integrated of order one, i.e., I (1); if stationary in their second differences, then they are integrated of order two, i.e., I (2). The order of integration of the variables was investigated using the Augmented Dickey-Fuller (ADF) tests. The data generated for this study were analysed with both descriptive and inferential statistics using the arithmetic mean, standard deviation, minimum and maximum values, and the Auto-Regressive Distributed Lag (ARDL) Regression technique. These were computed with the aid of E-Views version 10.

Model Specification and Estimation

The model specification for this study is given in functional form as:

$$FP = f(DPO, DY) \text{ ----- (i)}$$

In econometric form, the model becomes:

$$FP = \alpha_0 + \beta_1 DPO_{it} + \beta_2 DY_{it} + \mu_i \text{ ----- (ii)}$$

Where:

| | | |
|----------|---|--|
| FP | = | Financial performance (return on equity) |
| DPO | = | Dividend payout ratio |
| DY | = | Dividend yield |
| α | = | Regression Constant |
| β | = | Regression Coefficient |
| μ | = | Stochastic term |

In this study, our a priori expectation is that effective dividend policy will bring about increase in financial performance of deposit money banks in Nigeria. In summary, it is expected that $\beta_1, \beta_2, > 0$. To test the validity of our data and the model specified for this study, a robustness check was conducted as follows:

Unit Root Test

This preliminary analysis is conducted to test the presence of a unit root in the panel data series. The Augmented Dickey Fuller (ADF) test was applied and the results are shown in Table 1.

Table 1: Summary of the Augmented Dickey Fuller Unit Root Test of the Variables

| VARIABLE | ADF TEST STAT. | 5% CRITICAL VAL. | REMARKS |
|--------------|----------------|------------------|----------------|
| ROE | -2.861780 | -3.065585 | Non-stationary |
| DPO | -4.011127 | -3.052169 | Stationary |
| DY | -4.286816 | -3.733200 | Stationary |
| Δ ROE | -4.315336 | -3.065585 | Stationary |

The empirical results of the Augmented Dickey Fuller (ADF) unit root test at 5% critical levels in Table 1 indicates that Dividend Payout Ratio (DPO) and Dividend Yield (DY) were stationary at level $I(0)$ while Return on Equity (ROE) was stationary only at first differencing $I(1)$. Hence, the variables have a mixed order of integration of zero and one. This conclusion is based on comparison of the Augmented Dickey Fuller statistics and the critical values provided by Mackinnon (1996). Because the variables have different orders of integration, this permits us to conduct the Auto-regressive Distributed Lag (ARDL) model to know if the variables have a long run relationship.

Table 2: Error Correction Model

| ECM Regression Case 3: Unrestricted Constant and No Trend | | | | |
|--|-------------|------------|-------------|--------|
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 0.662444 | 0.065452 | 10.12099 | 0.0021 |
| D(ROE(-1)) | -1.325556 | 0.143213 | -9.255818 | 0.0027 |
| D(ROE(-2)) | -0.057273 | 0.078681 | -0.727912 | 0.5193 |
| D(ROE(-3)) | -0.635278 | 0.095065 | -6.682594 | 0.0068 |
| D(DPO) | -0.989252 | 0.148776 | -6.649282 | 0.0069 |
| D(DPO(-1)) | 1.636374 | 0.168356 | 9.719748 | 0.0023 |
| D(DY) | 6.385277 | 0.617038 | 10.34827 | 0.0019 |
| D(DY(-1)) | -0.552040 | 0.121155 | -4.556468 | 0.0198 |
| CointEq(-1)* | 0.457958 | 0.137940 | 10.56954 | 0.0018 |

The results in Table 2 show that the ECM is negative and statistically significant, showing that an established short-run relationship can be attained. The speed of Adjustment of -0.457958 implies that 45.79 percent of the deviation of ROE from its short run equilibrium can be reconciled per annum.

Table 3: Auto Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

| | | | |
|---------------|----------|---------------------|--------|
| F-statistic | 0.270711 | Prob. F(2,1) | 0.2944 |
| Obs*R-squared | 12.78698 | Prob. Chi-Square(2) | 0.1791 |

The results in Table 3 shows that there is no serial correlation in the model since the probability value of the F-statistic and the Chi-square of 0.2707 and 0.1791 respectively are greater than 5%.

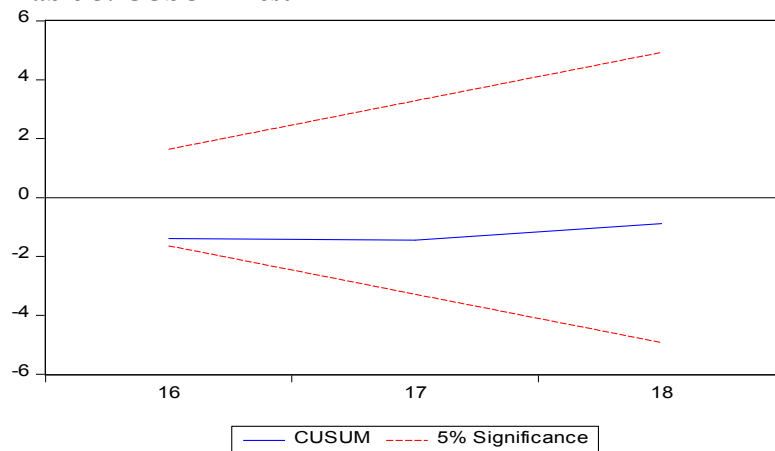
Table 4: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| | | | |
|---------------------|----------|----------------------|--------|
| F-statistic | 1.510666 | Prob. F(10,3) | 0.4060 |
| Obs*R-squared | 11.68041 | Prob. Chi-Square(10) | 0.3070 |
| Scaled explained SS | 0.471766 | Prob. Chi-Square(10) | 1.0000 |

The results of the Breusch-Pagan-Godfrey heteroskedasticity test shows that the null hypothesis is rejected and we then conclude that the residuals are not heteroskedastic since the probability statistic of the F-statistic and the Chi-square statistics are greater than 5%.

Table 5: CUSUM Test



The results in Table 5 shows that the model is stable since the expected values of the sequence are within the upper critical line and the lower critical line (within +4 and -4).

RESULT AND DISCUSSION

This section of the study covers data presentation, analysis and interpretations of the results based on the data collected. The first section covers the presentation of five year average data on the relationship between dividend payout ratio and dividend yield on financial performance of deposit money banks in Nigeria. Table 6 below shows the data that are collected from the financial statements and annual reports of banks selected for this study.

Table 6: Values of DPO, DY and ROE of Deposit Money Banks in Nigeria

| BANKS | DPO | DY | ROE |
|--------------------------|-------|-------|-------|
| Access Bank | 0.499 | 0.088 | 0.309 |
| Citi Bank | 0.165 | 0.013 | 0.143 |
| Ecobank | 0.994 | 0.981 | 0.59 |
| Fidelity Bank | 0.865 | 0.972 | 0.275 |
| First Bank | 0.149 | 0.002 | 0.097 |
| First City Monument Bank | 0.367 | 0.098 | 0.026 |
| Guaranty Trust Bank | 0.159 | 0.023 | 0.229 |
| Heritage Bank | 0.233 | 0.033 | 0.341 |
| Mainstreet Bank | 0.371 | 0.044 | 0.831 |

| | | | |
|-------------------------|-------|-------|-------|
| Polaris Bank Stanbic | 0.712 | 0.099 | 0.954 |
| Standard Chartered Bank | 0.757 | 0.001 | 0.436 |
| Sterling Bank | 0.198 | 0.073 | 0.233 |
| IBTC Bank | 0.289 | 0.064 | 0.121 |
| Union Bank | 0.877 | 0.097 | 0.563 |
| United Bank for Africa | 0.173 | 0.066 | 0.229 |
| Unity Bank | 0.331 | 0.075 | 0.234 |
| Wema Bank | 0.317 | 0.072 | 0.436 |
| Zenith Bank | 0.770 | 0.038 | 0.299 |

Source: Computed from the Financial Statements and Annual Reports of the Selected Banks

Descriptive Analysis of Data

The descriptive statistics shows the description of the data in the study. The descriptive statistics describes the mean, median, mode, standard deviation and normality test. Table 7 shows the descriptive statistics of the variables of the various banks for the time period.

Table 7: Descriptive Statistics

| | ROE | DPO | DY |
|--------------|------------|------------|-----------|
| Mean | 0.352556 | 0.457000 | 0.157722 |
| Median | 0.287000 | 0.349000 | 0.069000 |
| Maximum | 0.954000 | 0.994000 | 0.981000 |
| Minimum | 0.026000 | 0.149000 | 0.001000 |
| Std. Dev. | 0.247875 | 0.290236 | 0.299577 |
| Skewness | 1.072957 | 0.565040 | 2.420851 |
| Kurtosis | 3.462150 | 1.783085 | 6.974739 |
| | | | |
| Jarque-Bera | 3.613900 | 2.068472 | 29.43047 |
| Probability | 0.164154 | 0.355498 | 0.000000 |
| | | | |
| Sum | 6.346000 | 8.226000 | 2.839000 |
| Sum Sq. Dev. | 1.044510 | 1.432032 | 1.525692 |
| | | | |
| Observations | 18 | 18 | 18 |

Source: Author's computation using Eviews 10.0 Software

The descriptive statistics of the dependent and independent variables in the model are displayed in Table 7. From 2016 to 2020, the average value of ROE, DPO and DY are 0.352556, 0.457000 and 0.157722 respectively. These figures may be compared with the maximum values of ROE, DPO and DY which are 0.954000, 0.994000 and 0.981000 respectively. It can be concluded that the means of all the variables are significantly lower than its maximum values. Skewness is a measure of asymmetry of the distribution of series around its mean. The skewness of all the variables is above zero. It indicates a positive skewness. Thus, there is a right long-tailed distribution for the observation of each of the variables. The Kurtosis of a normal distribution is 6. Table 7 further shows that ROE, DPO and DY each have a Kurtosis of less than six, indicating that each of the distributions is platykurtic. The JarqueBera statistics of all the variables show that all the series are normally distributed since the JarqueBera probability values of ROE, DPO and DY which are 3.61, 2.07 and 29.43 are all greater than 0.05.

Test of Hypotheses

In order to test the two null hypotheses in this study, the variables were tested using Autoregressive Distributed Lag (ARDL) model with the aid of Eviews 10.0 to determine the extent to which the independent variables (DPO and DY) influence the dependent variable (FP). The Autoregressive Distributed Lag (ARDL) model was used to examine the relationship between dividend policy and financial performance, and the result obtained are presented in Table 8 below.

Table 8: Effect of Dividend Policy on Financial Performance

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|--------------------|-------------|-----------------------|-------------|-----------|
| ROE(-1) | 1.132402 | 0.385706 | 2.935921 | 0.0607 |
| ROE(-2) | 1.268283 | 0.379639 | 3.340763 | 0.0444 |
| ROE(-3) | -0.578005 | 0.213433 | -2.708134 | 0.0733 |
| ROE(-4) | 0.635278 | 0.356415 | 1.782412 | 0.1727 |
| DPO | -0.989252 | 0.427039 | -2.316536 | 0.1034 |
| DPO(-1) | -1.425584 | 0.400457 | -3.559894 | 0.0378 |
| DPO(-2) | -1.636374 | 0.389087 | -4.205679 | 0.0245 |
| DY | 6.385277 | 1.476368 | 4.324990 | 0.0228 |
| DY(-1) | 0.722815 | 0.222983 | 3.241571 | 0.0478 |
| DY(-2) | 0.552040 | 0.322770 | 1.710321 | 0.1857 |
| C | 0.662444 | 0.130565 | 5.073686 | 0.0148 |
| R-squared | 0.968911 | Mean dependent var | | 0.359214 |
| Adjusted R-squared | 0.865280 | S.D. dependent var | | 0.268283 |
| S.E. of regression | 0.098471 | Akaike info criterion | | -1.767125 |
| Sum squared resid | 0.029090 | Schwarz criterion | | -1.265009 |
| Log likelihood | 23.36988 | Hannan-Quinn criter. | | -1.813605 |
| F-statistic | 9.349671 | Durbin-Watson stat | | 2.057727 |
| Prob(F-statistic) | 0.045894 | | | |

*Note: p-values and any subsequent tests do not account for model selection.

Source: Eviews 10.0 Statistical Software

HO₁: Dividend payout ratio does not significantly affect return on equity of deposit money banks in Nigeria.

Table 8 above shows the Autoregressive Distributed Lag (ARDL) result for the study. According to the results, Dividend Payout Ratio (DPO) has a negative coefficient of -1.636374 which is significant with a p-value of 0.0245. The interpretation of the negative coefficients of DPO indicates that a decrease in DPO by a unit will lead to an increase in Return on Equity (ROE) holding every other thing constant. The value of the Adjusted R-Squared of 0.968911 implies that DPO and DY explained about 96.89% systematic variations in the dependent variable (ROE) over the observed years while the remaining 3.11% variations are explained by other determining variables outside the model. The F-statistic shows a significant probability value (0.045894 < 0.05). This means that the effect of the independent variables (DPO and DY) on the dependent variable (ROE) did not happen by chance. The Durbin-Watson statistic of 2.057727 indicates absence of autocorrelation. Since the probability value of Dividend Payout Ratio (DPO) of 0.0245 is less than the 5% level of significance, the null hypothesis is hereby rejected. This suggests that dividend payout ratio significantly affect return on equity of deposit money banks in Nigeria.

HO₂: Dividend yield does not significantly affect return on equity of deposit money banks in Nigeria.

According to the Autoregressive Distributed Lag (ARDL) results in Table 8, dividend yield has a positive coefficient of 0.552040 which is insignificant with a p-value of 0.1857. The interpretation of the positive coefficients of DY indicates that an increase in DY by one unit will lead to 0.552040 unit increase in Return on Equity (ROE). Since the probability value of dividend yield (DY) of 0.1857 is greater than the 5% level of significance, the null hypothesis is hereby accepted. This suggests that dividend yield does not significantly affect return on equity of deposit money banks in Nigeria.

Discussion of Findings

Given the empirical result of the model, this study found that dividend pay-out ratio has a negative significant relationship with return on equity while dividend yield does not significantly affect return on equity of deposit money banks in Nigeria. Previous studies related to the findings of this study include Santosa, Aprilia and Tambunan (2020), Idewe & Murad (2019), Rahan and Wali (2018), Enekwe, Nweze and Agu (2015), Kajola et al. (2015), Monogbe and Ibrahim (2015), Velnampy et al. (2014), Gulet al. (2012), Anijesushola and Jimoh (2012), Mohammed (2007), and Farsio et al. (2004). Santosa et al. (2020) found that dividend policy has a positive effect on firm value. In general, financial performance indicates an influence on firm value and less effect on dividend policy. Idewe and Murad (2019) revealed that there is a positive and significant relationship between dividend payout ratio and financial performance. On the contrary, there is a negative and insignificant relationship between dividend yield and financial performance. Monogbe and Ibrahim (2015) shows that there is a strong and positive significant relationship between ROCE, ASSET and dividend policy.

Rahan and Wali (2018) indicate that there is an insignificant positive relationship between return on equity (ROE) and dividend per share (DPS). Hence this study supports the relevant theories of dividend policy. Enekwe et al. (2015) affirm that dividend payout ratio (D.P.R) has positive relationship and dividend payout ratio (DPR) has statistically significant with return on asset (R.O.A) and return on capital employed (ROCE) while DPR has statistically insignificant with return on equity (ROE) of quoted cement companies in Nigeria. Kajola et al. (2015) reveal that a positive and significant relationship exists between dividend payout policy (DPO) and financial performance (ROA). Velnampy et al. (2014) showed that dividend policies do not affect companies' ROE and ROA. Gulet al. (2012) revealed that the difference in average market value (AMV) relative to book value of equity (BVE) is highly significant between dividend-paying companies and non-paying companies. Anijesushola and Jimoh (2012) found out that there is a significant positive interrelationship between the dividend payout and the performances of firms of the sampled firms in Nigeria. Mohammed (2007) reported a negative association between return on assets and dividend payout ratio, and leverage. Farsio et al. (2004) revealed a negative relationship between dividend payout and future earnings (financial performance).

CONCLUSION AND RECOMMENDATIONS

Dividend decision is one of the most critical decisions in corporate finance. It adds to the shareholders' wealth and to the market value of the firm. Management are in a dilemma about whether to pay a large, small or zero percentage of their earnings as dividends or to retain them for future investments. The questions therefore are: should the firm pay out money to its shareholders, or should the firm take that money and invest it for its shareholders? If a firm decides to pay a dividend, what percentage of its earnings should be paid? Given the above, will this affect the share price of the firm? Would the company lose some shareholders if they adopt a particular dividend policy? This has come about as a result of the need for management to satisfy the various needs of shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividends now. On the other hand, shareholders who would like to invest in the future will prefer dividends to be retained by the company and be reinvested. In this study, it was revealed that the effect of dividend policy on financial performance of deposit money banks in Nigeria is mixed. While dividend pay-out ratio has a negative significant relationship with financial performance (return on equity), dividend yield does not significantly affect financial performance (return on equity) of deposit money banks in Nigeria.

Based on the above findings and the conclusion drawn there from the following recommendations are made:

- i. Management of deposit money banks should have a good and robust dividend policy in place to determine the percentage of dividend pay-out that would enhance financial performance in term of return on equity.
- ii. Management of deposit money banks should invest more effort to increase dividend yield and improve its impact on financial performance (return on equity) of deposit money banks in Nigeria.

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Effect of Foreign Direct Investment and Foreign Portfolio Investment on Foreign Exchange Rate in Nigeria

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Abstract

Considering that the Net Inflow of Foreign Investment in Nigeria in the last thirty years from 1991 to 2020 is a negative Net worth and the Exchange rate has been on a downward slide within the same period, this paper examines the respective effect of Foreign Direct Investment and Foreign Portfolio Investment on the Nigerian Foreign Exchange rate using Official CBN rate and Bureau De Change (BDC) rate as proxies. Secondary Data used were sourced from the Central Bank of Nigeria and the World Bank, and the Data were analysed using time series and Multiple Linear Regression tools. The result shows that Foreign Direct Investment and Foreign Portfolio Investment have the same effect on the Nigeria Foreign Exchange rate. The findings show that both have a very weak positive effect on Nigeria Foreign Exchange. The result also shows that both have a moderate negative effect on CBN Official Exchange rate and the Bureau De Change rate and recommended that more of the effort of policymakers relating to the foreign exchange should be channelled toward strengthening the purchasing power of the Nigeria currency more.

Keywords: Foreign Direct Investment, Foreign Portfolio Investment, Foreign Exchange Rate, Net Inflow

INTRODUCTION

The official exchange rate of the Nigeria currency has fallen from N192.44 in 2016 to 1\$ to N358.81 to \$1 in 2020 and it has majorly continued to fall from a good position of N9.91 to \$1 in 1991, thirty years ago. As the slide in the exchange rate is under the official same it is in the black under the Bureau De Change (BDC). During the same period, the exchange rate slide from N13.51 to \$1 in 1991 to N433.70 to \$1 in the year 2020. Part of the effort to stabilize the Nigerian reserve trend is to increase the supply of foreign currency in circulation to meet up with the huge dollar demand of the Nigerian business, travel and other use. Nigeria is majorly an import-dependent country, and this requires the availability of foreign currency. One of the ways, in which a country can get an inflow of foreign currency is to attract foreign capital inflow into its economy majorly through Foreign Aid, Foreign Direct Investment and Foreign Portfolio Investments. While Foreign Aid is majorly either a grant or concessional loan for developmental purpose, Foreign Direct Investment and Portfolio investments are investments made by a firm or individual in another country majorly for business purposes. Oyarenti (2003) defines Foreign Portfolio Investment refers to the acquisition of an asset by a foreign national or company in a domestic stock market or money market through the holding of transferable securities, issued or guaranteed by the government of the host country. Such securities are held in the form of equity shares, debentures, bonds, promissory notes and money instruments. While Ehimare (2011) describes Foreign Direct Investment as an investment made by an investor or enterprises in another enterprises or equivalent in voting power or other means of control in another country to manage the investment and maximize profit. He went further to state this investment involves not only the transfer of fund but also the transfer of physical capital, the technique of production, managerial and marketing expertise, product advertising and business practice to make a profit.

Macauley (2012) opined that Nigeria's foreign investment can be traced back to the colonial era when the colonial masters had the intention of exploiting resources for the development of their economy stating that there was little investment made by these colonial masters with the research and discovery of oil, but since then, Nigeria's foreign investment has not been stable. He went further to state that the Nigerian governments have recognized the importance of FDI in enhancing economic growth and development and various strategies involving incentive policies and regulatory measure have been put in place to promote

the inflow of FDI to the country. Both FDI and FPI can be Inward Flow and Outward flow, this paper uses the Net Inward Flow (NIF) for the period under review. The Net Inward Flow is the difference between the total asset from the investment less the total liabilities. According to data from the World Bank, In the last 30 years (from 1991 to 2020), the respective total net value for FDI and FPI are negatives value of (\$174,846,789,946.33) and (\$77,768,195,304.79). Therefore the total net value for FDI and FPI (\$252,614,985,251.12). These figures show that foreign investment in Nigeria has not been favourable to foreign investors either as FDI and FPI. It is pertinent to understand the effect of this negative investment inflow on the exchange rate of the naira which has also been on a falling spree within the same period. The objective of this study is to examine the respective effect of FDI and FPI on the Foreign Exchange rate in Nigeria and compares the result of the effect of each on the Naira, in other to determine which has more effect on Nigeria exchange rate. And the scope of the review is 30 years from 1991 to 2020 using Net FDI and FPI as the dependent variables while the Central Bank of Nigeria (CBN) official rate and Bureau De Change rate are used as proxies to Foreign Exchange.

LITERATURE REVIEW

Conceptual Framework

Theophilus, Raymond and Darlinton (2019) define Foreign Direct Investment as the process whereby people in one country obtain ownership of assets to gain control over the production, distribution and other activities of a firm in a foreign country. They went further to explain the operational meaning of FDI as ownership of at least 10% of the ordinary shares of voting stock in a foreign enterprise. Thus, ownership of 10% ordinary shares is the criterion for the existence of a direct investment relationship while ownership of less than 10% is recorded as portfolio investment. Mariloman (2003), also define Foreign Direct Investment in a similar manner describing it as investment made to acquire a lasting management interest (usually at least 10% of voting stock) and acquiring at least 10% of equity share in an enterprise operating in a country other than the home country of the investor. Kazeem (2019), further explained that Foreign Direct Investment includes; external resources including technology, managerial and marketing expertise and capital and that all these generate a considerable impact on the host nation's productive capabilities, and the success of government policies of stimulating the productive base of the economy depends largely on her ability to control the adequate amount of FDI comprising of managerial, capital and technological resources to boost the existing production capacity. Abida and Abu (2010) opined that Foreign Direct Investment (FDI) not only provides developing countries (including Nigeria) with the much-needed capital for investment, it also enhances job creation, managerial skills as well as the transfer of technology. All of these contribute to economic growth and development.

Damian and Samuel (2019), expatiated Foreign Direct Investment (FDI) and posit that it is an investment geared towards controlling ownership in a business enterprise in the domestic country by an entity based in a foreign country and that it is one of the major sources of capital inflows to developing countries, from the resource surplus countries and among developing countries themselves, and has been widely considered to be important in contributing to growth in productivity in the receiving country. The went further to state that FDI is vital to any economy, as it augments domestic investment and that it's a major beneficiary of technological spillovers, job creation, improved managerial skills and other benefits from these inflows. Furthermore, they affirmed that fluctuation of exchange rate can lead to currency depreciation or appreciation and when the exchange rate appreciates, it causes the cost of production to rise in a country's economy, and this will lead to low and volatile FDI. Poverty, high inequality and underdevelopment also will ensue with the attendant huge deficit that will be recorded in the domestic country's balance of trade and payment. From the definitions and explanations above, it can be deduced that FDI is investment from outside the country to Nigeria and that this investment must of ownership of 10% and above in a company in Nigeria. The net Inward Foreign Direct Investment is the difference between the Financial assets less the financial liability of the investments of a firm or person from a foreign country into Nigeria. Equity Capital and Reinvested Earnings are examples of Foreign Direct Investment. It is Foreign Portfolio Investment when it is less than 10%.

Ezeanyejì and Ifeako (2019) define Foreign Portfolio Investment (FPI) as an aspect of international capital flows comprising of transfer of financial assets: such as cash, stock or bonds across international borders in want of profit and that it occurs when investors purchase non-controlling interests in foreign companies or buy foreign corporate or government bonds, short-term securities or notes. They noted that just as trade flows result from individuals and countries seeking to maximize their wellbeing by exploiting their comparative advantage, so too, are capital flows as individuals and countries seeking to make themselves better off, moving accumulated assets to wherever they are likely to be most productive. This position was also buttressed by Onyeisi, Odo and Anosi (2016) who states FPI does not give the investor the right to direct ownership of financial assets, or direct management of the corporate. The same points were made by Onuorah and Akujobi (2013) who describe Foreign Portfolio Investment (FPI) as an aspect of international capital flows' comprising of transfer of financial assets: such as cash; stock or bonds across international borders in want of profit stating that it occurs when investors purchase non-controlling interests in foreign companies or buy foreign corporate or government bonds, short term securities or notes. Ezeanyejì and Ifeako (2019) summarizes the definition of Foreign Portfolio Investment as equity and debt issuances including country funds, depository receipts and direct purchases by foreign investors of less than 10% control and as the foreign direct investor's purchase of shares of an enterprise in a country other than its own

From the definitions above, it is deduced that Foreign Portfolio Investments are an investment from a foreign country into Nigeria that is less than 10% of business equity and examples in Equity, government bonds, short term securities or notes and other financial derivatives. Just like FDI, The net Inward Foreign Portfolio Investment is the difference between the Financial assets less the financial liabilities of the investments. Nwala, Nwagboso and Nwankwo (2019) defines Equity Foreign Portfolio Investment (EFPI) to include net inflows from equity securities other than those recorded as direct investment and including shares, stocks, depository receipts, and direct purchases of shares in local capital markets by foreign investors. They further noted that the new emphasis on the equity market was driven by the failure of past nonmarket based strategies and the realization of the potential roles that the private initiative and the capital markets can play. Javed and Farooq (2009) explain that the Exchange rate tells how the unit of domestic currency can be changed with the other nations' currency unit, that is change of one country currency into the other country currency. They state that the demand and supply of currency actually are the main element of exchange rate instability and that exchange rate instability directly affects the decision-makers to decide that how much import and export are favourable. This explanation also shows that Foreign Investment decision can also be influenced by the stability and performance of the exchange rate of a country. The exchange rate is a vital macroeconomic variable regarded as an indicator of the competitiveness of the currency of any economy and remains one of the most important factors in a firm's FDI decision and a country's Foreign Direct Investment drive. The depreciation, appreciation or deliberate manipulation of a country's currency to another's in one way or the other determines the movement of the exchange rate, and also the types and volume of investment that is attracted by such a country. (Damain and Samuel, 2019).

Osemene and Aritiba (2018) explained that the Nigeria exchange rate system has witnessed so much volatility both in the official and bureau-de change market after the deregulation of the foreign market also observed that the exchange rate policy in Nigeria has been moving in a circular form, starting from a fixed exchange rate system from 1986-1993, temporary halt deregulation in 1994 when the official exchange rate was pegged and reversal of the policy in 1995 with the guided deregulation of the Foreign Exchange market and they affirmed that despite these policy efforts by the Nigeria monetary authority to maintain exchange rate stability, the Naira continues to fluctuate widely against the US dollar. Bilawal, Ibrahim, Abbas, Shuaib, Ahmed, Hussain, and Fatima, (2014), states that currency value can be explained in two ways, first, one is when the currency is devaluated, the domestic goods become cheaper and the foreign goods become expensive and the demand of local products increases, and then the foreign country improves trade balance and promotes local goods and the second one is the real value of cash reduce due

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to devaluation of money where the foreign currency export becomes cheaper and import becomes expensive as the value of local currency and goods goes down. According to Goldberg and Charles (2005), it is a popular claim in the international business community is that exchange rates are one of the most important factors in a firm's Foreign Direct Investment decision because a devaluation of a country currency can give foreigners an edge in buying the country's asset. Ordinarily, it would be said that FDI, FPI and Foreign Exchange rate have direct relationships since a stable exchange rate encourages the inflow of investment from other countries, and also once there is a huge inflow of investment in a country it improves the performance of the Foreign Exchange rate.

Empirical Review

In the reserach effort of Adeyemi, Joys, Abiola, and Oluwatomisin (2019) where they examine the link between exchange rate volatility and foreign portfolio in Nigeria using data that covers the period 1996 Q1 to 2016 Q4 adopting the vector autoregressive model in ascertaining the dynamics between exchange rate volatility and Foreign Portfolio Investment in Nigeria. Their study also examined the impact of exchange rate innovations (shocks) on Foreign Portfolio Investment and equally assesses how induced variations in Foreign Portfolio Investment are decomposed among the variables in the model. The paper observed that exchange rate volatility and market capitalization significantly and largely explain the variations in Foreign Portfolio Investment and the impulse response analysis shows that Foreign Portfolio Investment was more responsive to standard deviation shocks in market capitalization and exchange rate, implying that these variables were more responsible for the dynamism in FPI. As the horizons expand, shocks to market capitalization and exchange rate increase Foreign Portfolio Investment, whereas shocks to GDP and inflation made Foreign Portfolio Investment dwindle. In the same manner, in decomposing, the induced variation in Foreign Portfolio Investment, forecast error shocks in market capitalization, exchange rate and GDP explain more of the variation in Foreign Portfolio Investment. Murtala (2017) seeks to find out the relationship between Foreign Exchange rate and Foreign Direct Investment (FDI) and the impact of FDI on the gross domestic product (GDP) in Nigeria given the recent and past devaluation of Nigeria currency as well as the exchange rate changes over the years. The study covers a period of 26 years from 1990 - 2015 using data obtained from the Central Bank of Nigeria (CBN) website for FDI, exchange rate, and GDP. The variables were analyzed using regression and correlation analysis techniques and the findings from the analysis show that there is a strong positive relationship between FDI and exchange rate in Nigeria on one hand and there is a weak positive relationship between FDI and GDP on the other hand. They also found out that there was a significant inflow of FDI from 2005-2014 due to a rise in the exchange rate in the same period. The study concludes that exchange rate, FDI, and GDP are positively correlated. The study recommended that the Government of Nigeria should fully liberalize the exchange rate regime devoid of fixed multiple exchange rates to attract more FDI and contribute to GDP, this is because the commercial viability of any FDI is based on exchange rate stability.

Osemene and Arotiba (2018), investigated the effects of exchange rate volatility on Foreign Portfolio Investment inflows to Nigeria using both official exchange rate and bureau-de change rate. The study uses monthly time series data sourced from the Central Bank of Nigeria covering a period of 10 years from 2007-2016. The study employed General Autoregressive Conditional Heteroskedasticity GARCH (1, 1) model to test for volatility in both official and BDC rate and a two-stage least square (TSLS) method was used to test the relationship between the volatility and Foreign Portfolio Investment in Nigeria and results revealed that volatility in the official rate exerted positive significant impact of 8.119872 on Foreign Portfolio Investment inflow into Nigeria, while the BDC volatility showed a negative significant impact of -5.961654 on Foreign Portfolio Investment inflow into Nigeria within the study period. The study concluded that the official exchange rate volatility has a significant and positive effect on Foreign Portfolio Investment in Nigeria, while the bureau-de change volatility has a significant and negative relationship with Foreign Portfolio Investment in Nigeria. Hence, the study recommended that monetary authority should formulate such policies that will stabilize the exchange rate to boost the investors' confidence. Nwosa and Amassoma (2014), examined the causal nexus between capital inflows

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(Foreign Direct Investment and Foreign Portfolio Investment) and exchange rate in Nigeria and also examined the impact of these capital inflows on the exchange rate in Nigeria for the period spanning 1986 to 2011. The study employed both granger causality and error correction modelling techniques. The causality estimates showed no causal link between capital inflows (Foreign Direct Investment and Foreign Portfolio Investment) and exchange rate within this period. The long-run regression estimate revealed that Foreign Direct Investment had a negative effect on the exchange rate while portfolio investment had a positive impact on the exchange rate. However, the magnitude of the impacts was very minute and the result of the short-run was similar to the causality result, indicating that neither Foreign Direct Investment nor Foreign Portfolio Investment had a significant impact on the exchange rate. The study concluded that the relationship between capital inflows and the exchange rate in Nigeria is a long-run phenomenon.

Adaramola and Obisesan, (2015). The fundamental objective of this research work is to assess the impact of Foreign Direct Investment on Nigerian capital market development given the role of the latter in stimulating the development of the nation's economy. The study employed the ADF unit root test and Johansen co-integration test to analyze the secondary data obtained from the Central Bank of Nigeria statistical bulletin from 1970-2010. The absence of co-integration between Foreign Direct Investment and market capitalization informed the resort to OLS regression result which shows that Foreign Direct Investment impact positively and significantly on market capitalization. Since Foreign Direct Investment is a significant determinant. Efforts should be made by the government and monetary authority to encourage Foreign Direct Investment into Nigeria. However, given the lack of co-integration and low beta weight suggest that emphasis on Foreign Direct Investment as a way of stimulating long-run growth in a developing country like Nigeria does not worth the while. Mika'ilu and Yunusa (2018), examined the impact of Foreign Direct Investment (FDI) on stock market development in Nigeria using annual data from 1981 to 2016. The variables such as stock market development proxied by market capitalization, Foreign Direct Investment, exchange rate, inflation rate and gross domestic savings were used in the study. The study found that Foreign Direct Investment has a positive and statistically insignificant effect on stock market development. Exchange rate and gross domestic savings exert a positive and statistically significant impact on stock market development, while the inflation rate has an insignificant negative influence on stock market development in Nigeria throughout the study period. From the foregoing, this study recommends the followings: first, there is a need for the government to devise several means that will motivate the foreign investors to diversify their investment from the oil sector to other sectors of the economy with special reference to the stock exchange market. Second, there is also the need for the government to redesign the existing exchange rate policy and ensure full implantation of the policy with the view to revive the value of our local currency and to stabilize unfavourable fluctuations of the exchange rate. Finally, governments in collaboration with the private individual and companies should diversify their investment to other sectors such as agriculture, manning, manufacturing among others to create more employment opportunities and improve on income generations. That will also increase the productive capacity of the economy thereby reduce the rate of prices of commodities and increases the domestic savings.

Chukwurah (2019) examined the place of the exchange rate in determining Foreign Direct Investment inflow into the Nigerian economy using time series data from 1980 to 2017. The study adopted the use of secondary sources and a variety of primary documentary evidence and the Autoregressive Distributed Lag (ARDL) estimation approach and error correction mechanism within the framework of dynamic OLS (DOLS) estimation was used to analyze the data. The analysis used the Bounds testing approach in determining the cointegration among the variables in the various equations in the selected countries. Analysis using the Bounds testing approach to cointegration confirmed the existence of a long-run relationship among the variables of the models. In determining the impact of the exchange rate on Foreign Direct Investment inflow in Nigeria, we estimated an ARDL model. Results: The results indicate that the exchange rate affects FDI in both the long and short run. The result also reveals that the impact of the exchange rate on FDI in the short run continuous up to three periods after the initial disturbance. Nwala,

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Nwagboso and Nwankwo (2019) investigates the impact of Foreign Portfolio Investment volatility on total market capitalisation in Nigeria between 2007 M1 and 2018 M12. Data generated were analysed using the Exponential Generalized Conditional Heteroscedasticity (EGARCH) and Autoregressive distributed lag (ARDL) techniques. Findings from the study showed that volatility in Equities investment in Foreign Portfolio Investment has a significant impact on total market capitalisation in Nigeria. The study however revealed that Volatility in Bond investment by foreign portfolio has no significant impact on total market capitalisation in Nigeria between 2007 and 2018. Information asymmetries that exist within capital market operations, as well as the unpredictability of the activities of the international markets hugely contributes to volatilities of Foreign Portfolio Investment in a bond that impacts insignificantly on capital market development in Nigeria. The study further revealed that Volatility in Money Market instruments foreign portfolio has no significant impact on total market capitalisation in Nigeria. The study thus recommends that there is the need for capital market regulatory authorities to develop and implement proper policies that could cushion the effect of unpredictable global activities that reverses Foreign Portfolio Investments inflows.

Theoretical Framework

Marginal Efficiency Hypothesis.

Cited by Onyeisi, Odo and Anosi (2016), this theory sees investment decisions as being dependent on the internal rate of return (IRR) generated by investing in a particular asset called Marginal Efficient of Investment (MEI) and the prevailing market rate of interest rate. The theory is traced to John Maynard Keynes. Keynes defined the IRR as the rate of discount which will make the present value of the series of annuities given by the returns expected from the capital asset during its useful life just equal its supply price. Keynes also utilized the concept of the marginal efficiency of capital (MEC) in the development of marginal efficiency theory. He defined MEC as the rate of discount that equates the current cash outlay with the present value of future cash receipt. The marginal efficiency hypothesis states that the marginal efficiency of investment will be compared to the market rate of interest and such comparison will generate a set of a decision rule for firms. The appropriate rule is: $MEI \geq r$, accept investment proposal or $MEI < r$, reject investment proposal. The rule further defined, r , as the market rate of interest and states that where $MEI = r$, investment is considered to be at its optimum or equilibrium level.

Modern Portfolio theory

Cited by Nwala, Nwagboso and Nwankwo (2019), Modern portfolio theory (MPT) is a theory of investment that attempts to explain how investors can maximize return and minimize risk. Modern portfolio theory has revolutionized the world of investment management by allowing managers to quantify the investment risk and expected return of a portfolio. The theory is primarily concerned with risk and return. The investor is concerned only with the expected values of securities and interested in the expected value of the portfolio. Harry Markowitz propounded the modern portfolio theory (MPT). Essentially, MPT is an investment framework for the selection and construction of investment portfolios based on the maximization of expected returns of the portfolio and the simultaneous minimization of investment risk. The theory's underpinning concept is that risk is an inherent part of a higher reward. MPT assumes that investors are risk-averse. This suggests that given two sets of investments that offer equal expected return, investors will prefer the less risky one. Thus, an investor will take on increased risk only if compensated by higher expected returns. On the other, an investor who wants a higher expected return must assume more risk.

Pull and Push Factors Theory

Cited by Adeyemi, Joys, Abiola, and Oluwatomisin (2019), A fundamental theory that was considered is the pull and push factors as they are two classes of theories that explain the direction of private capital flows. There are global factors and country-specific factors that explain FPI inflows in various regions. These global factors may be called the 'push' factors and the country-specific factors are called the 'pull'

factors. According to economic literature, push factors are those, which account for the availability of capital flows into the recipient country. They highlight the effects of global changes on portfolio flows such as interest rates, low potential growth rate, risk aversion and portfolio diversification. The focus is on economic conditions in home countries that affect the availability of capital that can flow into the recipient countries, these factors are essentially exogenous. The pull factors are those local economic forces that determine the receipt of capital inflows into a country such as low inflation, trade openness, high growth potential and high-interest rates. It deals with the economic developments in the receiving countries that affect their demand for capital inflows. Some authors have taken into account the push and pull factors.

The Purchasing Power Parity (PPP) Theory

The purchasing power parity theory was propounded by Professor Gustav Cassel of Sweden. According to this theory, the rate of exchange between two countries depends upon the relative purchasing power of their respective currencies. Such will be the rate that equates to the two purchasing powers. The purchasing power parity between two countries is defined as either the ratio of the countries' price levels (absolute PPP) or the product of the exchange rate in a base period and the ratio of the countries' price indices (relative PPP). PPP theory consists of two definitions and two propositions, all involving equilibrium exchange rates. The short-run equilibrium exchange rate is defined as the rate that would exist under a freely floating (i.e., unmanaged) exchange rate system. The long-run equilibrium exchange rate is defined as the fixed exchange rate that would yield the balance of payments equilibrium over a period incorporating any cyclical fluctuations in the balance of payments (including those related to business cycles at home and abroad). Furthermore, the latter definition assumes the absence of special policies to avoid balance of payments disequilibrium (e.g., the use of monetary and fiscal restraint or trade and payments restrictions to prevent or suppress a deficit). The balance of payments concept used is an inclusive one, generally the official settlements or basic balance, rather than the current account or trade balance. The propositions of PPP theory are (1) that the short-run equilibrium exchange rate is a function of the long-run equilibrium exchange rate in the sense that the former variable tends to approach the latter, and (2) that the PPP is either the long-run equilibrium exchange rate or the principal determinant of it. (Lawrence 1976)

The major gap identified in the literature review is that the value of Foreign Direct Investment and Foreign Portfolio Investment used by researchers like Adeyemi, Joys, Abiola, and Oluwatomisin (2019), Murtala (2017), Osemene and Arotiba (2018), and Nwosa and Amassoma (2014), is the total inflow of funds into the country not minding the outcome of such investment in the Nigeria economy and the results show a significant relationship between foreign investment and exchange rate in Nigeria. To fill this gap, this paper is using the net value of the foreign investment, which represents the actual Net worth of foreigners investment in Nigeria, that is, asset less liability of all foreign investment so that the effect of the actual worth of these investments will be known on the volatility of the Nigeria exchange rate.

METHODOLOGY

This research used pooled data from a secondary source. The data were collected from the website of the Central Bank of Nigeria (CBN) and the World bank. The variables of this study are Foreign Direct Investments (FDIs), Foreign Portfolio Investments (FPIs) and the CBN official exchange rate and the Bureau De Change rate which were proxy to Foreign Exchange rate. The period review is 30 years from 1991 to 2020. The FDIs and FPIs are measured in the net inflow of investment into Nigeria. The net inflow is represented as asset less related liability during the period under review, while the exchange is measured at the rate of 1 Dollar to the Naira yearly as provided by the CBN. The Multiple Linear regression (MLR) is used to analyse the data to determine the effect of, first, the effect of FDI on the Foreign Exchange rate in Nigeria and secondly, to determine the effect of FPI on the Foreign Exchange rate in Nigeria. Autocorrelations is used to determine the time series of the variables. Nwosa and Amassoma (2014), Murtala (2017), and Adaramola and Obisesan, (2015) also used regression analysis in

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their papers relating to this topic. The adopted model for the paper is based on the objective of the paper representing the examination of FDI and FPI on Foreign Exchange rate are

$$FDI = \beta_0 + \beta_1 OFC + \beta_2 BDC \text{ -----(i),}$$

$$FPI = \beta_0 + \beta_1 OFC + \beta_2 BDC \text{ -----(ii)}$$

β_0 is the intercept of the FPI, β_1 to β_2 = the coefficients of the variables to be estimated, (e) is the random variable or error term. OFC is CBN Official rate will the BDC is the Bureau De Change rate.

RESULT AND DISCUSSION

$$1. FDI = \beta_0 + \beta_1 OFC + \beta_2 BDC \text{ -----(e),}$$

| Time | Series | Autocorrelations | | of | Residuals | | of | FDI-MEAN |
|------|-------------|------------------|-------------|-----|-------------|-----|-------------|----------|
| Lag | Correlation | Lag | Correlation | Lag | Correlation | Lag | Correlation | Lag |
| 1 | 0.011852 | 8 | -0.023581 | 15 | 0.001441 | 22 | -0.047713 | |
| 2 | -0.002230 | 9 | 0.056306 | 16 | -0.034323 | 23 | -0.059130 | |
| 3 | -0.023759 | 10 | 0.008917 | 17 | -0.037104 | 24 | -0.032540 | |
| 4 | 0.010857 | 11 | 0.008097 | 18 | -0.035468 | 25 | -0.062629 | |
| 5 | -0.007499 | 12 | 0.011952 | 19 | -0.037368 | 26 | -0.042247 | |
| 6 | -0.005531 | 13 | 0.017705 | 20 | -0.048190 | 27 | -0.064621 | |
| 7 | 0.037404 | 14 | -0.038686 | 21 | -0.041564 | | | |

| Multiple | Regression | Summary | Section |
|--------------------------|--------------|--------------------------|--------------|
| Parameter | Value | Parameter | Value |
| Dependent Variable | FDI | Rows Processed | 30 |
| Number Ind. Variables | 2 | Rows Filtered Out | 0 |
| Weight Variable | None | Rows with X's Missing | 0 |
| R2 | 0.2528 | Rows with Weight Missing | 0 |
| Adj R2 | 0.1953 | Rows with Y Missing | 0 |
| Coefficient of Variation | -3.6000 | Rows Used in Estimation | 30 |
| Mean Square Error | 2.408161E+20 | Sum of Weights | 29.000 |
| Square Root of MSE | 1.551825E+10 | Completion Status | Normal |
| Completion | | | |
| Ave Abs Pct Error | 1368.595 | Autocorrelation (Rho) | 0.6170 |

| Descriptive | | Statistics | | | Section |
|-------------|-------|---------------|--------------------|---------------|---------------|
| Variable | Count | Mean | Standard Deviation | Minimum | Maximum |
| OFC | 29 | 133.3677 | 97.83952 | 9.91 | 358.81 |
| PRL | 29 | 162.711 | 113.2983 | 13.51 | 433.7 |
| FDI | 29 | -5.828227E+09 | 1.733461E+10 | -9.522337E+10 | -2.096783E+08 |

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| Correlation | Matrix | Section |
|-------------|--------|---------|
|-------------|--------|---------|

| | OFC | PRL | FDI |
|-----|---------|---------|---------|
| OFC | 1.0000 | 0.9128 | -0.4843 |
| PRL | 0.9128 | 1.0000 | -0.4972 |
| FDI | -0.4843 | -0.4972 | 1.0000 |

| Regression | Equation | Section |
|------------|----------|---------|
|------------|----------|---------|

| Independent Variable | Regression Coefficient b(i) | Standard Error Sb(i) | T-Value to test H0:β(i)=0 | Prob Level | Reject H0 at 5%? |
|----------------------|-----------------------------|----------------------|---------------------------|------------|------------------|
| Intercept | 20466625669.0176 | 13106758983.2330 | 1.562 | 0.1305 | No |
| OFC | -72355719.7150 | 164375097.9983 | -0.440 | 0.6634 | No |
| PRL | -106491717.2004 | 133778518.8820 | -0.796 | 0.4332 | No |

Estimated Model

20466625669.0176-72355719.7150332*OFC-106491717.200357*PRL

| Regression | Coefficient | Section |
|------------|-------------|---------|
|------------|-------------|---------|

| Independent Variable | Regression Standardized Coefficient | Standard Error | Lower 95% C.L. | Upper 95% C.L. | C.L. |
|----------------------|-------------------------------------|------------------|------------------|------------------|---------|
| Intercept | 20466625669.0176 | 13106758983.2330 | -6474703266.2447 | 47407954604.2800 | 0.0000 |
| OFC | -72355719.7150 | 164375097.9983 | -410233572.6307 | 265522133.2006 | -0.1827 |
| PRL | -106491717.2004 | 133778518.8820 | -381477401.0207 | 168493966.6200 | -0.3304 |

Note: The T-Value used to calculate these confidence limits was 2.056.

| Analysis | of | Variance | Section |
|----------|----|----------|---------|
|----------|----|----------|---------|

| Source | DF | R2 | Sum of Squares | Mean Square | F-Ratio | Prob Level |
|-----------------|----|--------|----------------|-------------------------------|---------|------------|
| Intercept | 1 | | 5.388658E+20 | 5.388658E+20 | | |
| Model | 2 | 0.2528 | 2.118034E+21 | 1.059017E+21 | 4.398 | 0.0226 |
| Error | 26 | 0.7472 | 6.261217E+21 | 2.408161E+20 | | |
| Total(Adjusted) | | 28 | | 1.00008.379252E+212.99259E+20 | | |

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The result shows that the Foreign Direct Investment on Foreign Exchange rate is a very weak direct relationship at 0.2528. The result also shows that both the CBN Official Exchange rate and the Bureau De Change rate have a moderate negative impact on Foreign Direct Investment at -0.4843 and -0.4972 respectively. The time series of the variable also shows that Foreign Direct Investment will remain at the same level in the short and long run.

$$FPI = \beta_0 + \beta_1 OFC + \beta_2 BDC \text{ -----(ii).}$$

| Time | | Series | | Autocorrelations | | of | | Residuals | | of | | FPI-MEAN | |
|------|-------------|--------|-------------|------------------|-------------|-----|-------------|-----------|-------------|-----|-------------|----------|-------------|
| Lag | Correlation | Lag | Correlation | Lag | Correlation | Lag | Correlation | Lag | Correlation | Lag | Correlation | Lag | Correlation |
| 1 | 0.074184 | 8 | 0.311011 | 15 | -0.077982 | 22 | -0.060814 | 2 | -0.134003 | 9 | -0.009126 | 23 | -0.047873 |
| 2 | -0.134003 | 10 | 0.047816 | 16 | -0.064563 | 24 | -0.066467 | 3 | 0.220570 | 11 | -0.000961 | 25 | -0.033858 |
| 3 | 0.220570 | 12 | -0.150708 | 17 | -0.060745 | 26 | -0.075100 | 4 | 0.013640 | 13 | -0.045050 | 27 | -0.056539 |
| 4 | 0.013640 | 14 | -0.017899 | 18 | -0.082569 | | | 5 | 0.078877 | 20 | -0.042225 | | |
| 5 | 0.078877 | | | 19 | -0.073964 | | | 6 | -0.099187 | 21 | -0.077653 | | |
| 6 | -0.099187 | | | | | | | 7 | 0.098036 | | | | |
| 7 | 0.098036 | | | | | | | | | | | | |

| Multiple | | Regression | | Summary | | Section | |
|--------------------------|--------------|--------------------------|--------|-------------------------|--------|-----------------------|--------|
| Parameter | Value | Parameter | Value | Parameter | Value | Parameter | Value |
| Dependent Variable | FPI | Rows Processed | 30 | Rows with X's Missing | 0 | Rows with Y Missing | 0 |
| Number Ind. Variables | 2 | Rows Filtered Out | 0 | Rows Used in Estimation | 30 | Sum of Weights | 29.000 |
| Weight Variable | None | Rows with Weight Missing | 0 | Completion Status | Normal | Autocorrelation (Rho) | 0.3248 |
| R2 | 0.2860 | Rows with Y Missing | 0 | | | | |
| Adj R2 | 0.2311 | Sum of Weights | 29.000 | | | | |
| Coefficient of Variation | -2.3781 | Completion Status | Normal | | | | |
| Mean Square Error | 2.528717E+19 | | | | | | |
| Square Root of MSE | 5.028635E+09 | | | | | | |
| Completion | | | | | | | |
| Ave Abs Pct Error | 8971.376 | | | | | | |

| Descriptive | | Statistics | | | | Section | |
|-------------|-------|---------------|--------------------|---------------|--------------|-------------|---------|
| Variable | Count | Mean | Standard Deviation | Minimum | Maximum | Correlation | Section |
| OFC | 29 | 133.3677 | 97.83952 | 9.91 | 358.81 | | |
| PRL | 29 | 162.711 | 113.2983 | 13.51 | 433.7 | | |
| FPI | 29 | -2.592273E+09 | 6.029498E+09 | -2.694783E+10 | 3.401811E+09 | | |
| Correlation | | Matrix | | | | Section | |

| | OFC | PRL | FPI |
|-----|--------|--------|---------|
| OFC | 1.0000 | 0.9517 | -0.5300 |

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| | | | |
|-----|---------|---------|---------|
| PRL | 0.9517 | 1.0000 | -0.5263 |
| FPI | -0.5300 | -0.5263 | 1.0000 |

| Regression | Equation | | | | Section |
|----------------------|-----------------------------|----------------------|---------------------------|------------|------------------|
| Independent Variable | Regression Coefficient b(i) | Standard Error Sb(i) | T-Value to test H0:β(i)=0 | Prob Level | Reject H0 at 5%? |
| Intercept | 3585946238.1746 | 2517428044.3161 | 1.424 | 0.1662 | No |
| OFC | -26279620.0504 | 45951640.2893 | -0.572 | 0.5723 | No |
| PRL | -16867729.9569 | 39182546.4927 | -0.430 | 0.6704 | No |

Estimated Model

3585946238.17459-26279620.0504444*OFC-16867729.9569069*PRL

| Analysis | of Variance | | | | Section |
|------------------|-------------|--------|----------------|--------------|------------|
| Source | DF | R2 | Sum of Squares | Mean Square | Prob Level |
| Intercept | 1 | | 1.296711E+20 | 1.296711E+20 | |
| Model | 2 | 0.2860 | 2.633744E+20 | 1.316872E+20 | 5.208 |
| Error | 26 | 0.7140 | 6.574663E+20 | 2.528717E+19 | 0.0125 |
| Total (Adjusted) | 28 | 1.0000 | 9.208407E+20 | 3.288717E+19 | |

The result shows that the Foreign Portfolio Investment on Foreign Exchange rate is a very weak direct relationship at 0.2860. The result also shows that both the CBN Official Exchange rate and the Bureau De Change rate have a moderate negative relationship on Foreign Portfolio Investment at -0.5300 and -0.5263 respectively. The time series of the variable also shows that Foreign Portfolio Investment will remain at the same level in the short and long run.

Based on the result of the research, Foreign Direct Investment and Foreign Portfolio Investment have the same effect on the Nigeria Foreign Exchange rate. The findings show that both have a very weak positive effect on Nigeria Foreign Exchange at 0.2528 and 0.2860 respectively. The result also shows that both have a moderate negative effect on the CBN Official Exchange rate and the Bureau De Change rate.

CONCLUSION AND RECOMMENDATION

The total Net worth of foreign investment in Nigeria in the last thirty year from 1991 to 2020 is a negative value of \$252,614,985,251.12, and this shows that foreign investors are having more liabilities from their investment in Nigeria. In the same vein, Nigeria Foreign Exchange rate has been on a downward slide within the same period falling from N9.91 to 1\$ to N358.81 to \$1. This paper examines the respective effect of FDI and FPI on the Nigeria Exchange Rate using the CBN Official rate and BDC rate as proxies. The literature reviews show that scholars like Adeyemi, Joys, Abiola, and Oluwatomisin (2019), Murtala (2017), Osemene and Arotiba (2018), and Nwosa and Amassoma (2014), uses the actual inflow of foreign investment into Nigeria not minding the liabilities and the result shows a significant relationship between the FDI and or FPI on Foreign Exchange rate. This research work using the Net worth of foreign investment in Nigeria shows that Foreign Direct Investment and Foreign Portfolio Investment have the same effect on the Nigeria Foreign Exchange rate. The findings show that both have a very weak positive effect on Nigeria Foreign Exchange The result also shows that both have a moderate negative effect on

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the CBN Official Exchange rate and the Bureau De Change rate. This finding aligns with the Purchasing Power Parity (PPP) Theory that states that the rate of exchange between two countries depends upon the relative purchasing power of their respective currencies and concluded that in the case of Nigeria, Foreign Investment do not have a significant effect on its foreign exchange rate.

Based on the findings of this research work, it is recommended that more of the effort of policymakers relating to foreign exchange should be channelled toward strengthening the purchasing power of the Nigerian currency more. Foreign Investment can support the other sectors of the economy like creating more jobs in the short run, but in the long run with a negative net worth. It has no significant effect on Nigeria Exchange rate.

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Dividend Behaviour of Deposit Money Banks: The Case of Nigeria

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Abstract

The driving force behind this study is the fact that dividend policy formulation is a subject of controversy from the theoretical point of view as well as the inherent problems that firms are practically confronted with in arriving at a particular dividend policy that would meet the expectations of the shareholders vis-à-vis their own interests. Therefore, it becomes imperative to look at the Dividend behaviours of some selected Nigerian commercial banks in relation to their earnings and market values. This study took its course from two theoretical perspectives, namely dividend is relevant and irrelevant views in relation to market values of companies. The population of this study consisted of the current 22 licensed Deposit Money banks in Nigeria. However, 6 banks were randomly selected from 12 of the 22 commercial banks currently on the listing of Nigeria Stock Exchange. Secondary data were collected for the purpose of this study. They were obtained from the website of Nigeria Stock Exchange and annual financial statements of the selected banks. Pearson Product-Moment Correlation Coefficient was employed as the statistical tool to test the hypotheses. The study found out that there is a significant relationship between the earnings and dividend policies of Nigerian commercial banks, while there is also a significant relationship between their dividend policies and market values. The implications of these findings are that there would be always pressures on the banks for better performance as well as the need to pay dividends. The study therefore recommended that; Nigerian commercial banks should ensure they always achieved improved financial performance yearly to enable them meet up current year dividend payments as well as build up retained earnings that could be used to offset dividends payments in bad years. By so doing they could achieve stable dividend policy. Similarly, Nigerian commercial banks should reduce their reliance on internal source of finance in order to have adequate liquidity capacity to meet up dividend payments as at when due and not just declared dividends and no payments.

Keywords: Dividend behavior, Dividend policy, Deposit Money Banks, Nigeria

INTRODUCTION

Nigerian Deposit Money Banks just like other commercial companies owe duty of fiduciary responsibility to their owners (shareholders). Their shareholders have some expectations on their investment in them as it is typical of all shareholders of companies. One of the fundamental things that a shareholder expects from his investment is to enjoy commensurate earnings. This means that a shareholder expects his company to generate earnings that are adequate to compensate the risk and sacrifice that are attributable to his investment. Meeting this expectation of the shareholders is of paramount importance to companies, which Nigerian commercial banks are not an exception. This is on the premise that an average shareholder would withdraw his investment from a company that is found wanting in terms of earnings generation.

Moreover, it is one thing for a company to generate net earnings for the shareholders, but it is another thing for the company to resolve how the earnings should be administered in the interest of shareholders. Companies usually transfer their net earnings to their shareholders through payment of dividends. However, a company must indeed take a decision whether it must distribute all its earnings to the shareholders, or retains all the earnings, or give portion of the earnings to the shareholders and retain the balance. This decision-making process is what is known as dividend decision. And this culminated in what is known as dividend policy. Simply put, dividend policy refers to the percentage of earnings that a company pays in cash or otherwise to its shareholders. The percentage is known as “dividend-payout ratio”. In that regard, Watson and Head (1998) highlighted that traditionally, corporate finance function consisted of two obvious areas of decision making, namely investment and finance decisions. Under the investment decision, investment projects are evaluated, and profitable projects selected. On the other

hand, finance decision involves the source where finance could be raised to execute the selected profitable projects. They went further to explain that dividend decision, which entails the amount of earnings a firm could retain and the amount it would pay to the shareholders, has a closely bearing with both investment and financing decisions. To clarify this relationship, they gave an example that a company with few profitable investment projects could return more funds to the shareholders through increased dividends. Besides, if a company with many profitable investment projects pays to its shareholders high dividends, then the company must seek for finance from external sources in order to execute the selected profitable investment projects. This above analysis implies that, if it is a company's policy to execute all profitable investment projects by using retained earnings, then the investment decision could affect the dividend-payout ratio. In addition, high dividends in the face of many profitable investment projects, would force such company to raise finance from without.

Furthermore, dividend policy has a peculiar complexity and the complexity is akin to the proverbial "two sides of a coin". It is important to mention here that the phrase in the bracket in the above quotation is that of the investigator. In view of the above reality, many writers in the field of finance have agreed that "dividend decision" had become one of the fundamental functions in modern corporate finance. From the foregoing, dividend policy could communicate the performance of a company to its shareholders as well as any other interested parties, most especially potential investors. This means dividend policy can influence the supply and demand for the shares of a given company. Invariably, the share price of a given company could be influenced by its dividend policy. The fact that dividend decision is in the mainstream of finance functions in corporate organisations is no more in doubt. However, the dividend decision seems to be a difficult issue to many companies, if not all. In that regard, Arnold (1998) pointed out that managers have a range of forces to contend with in formulating their dividend policies. He said there are forces that pull managers towards paying out either a high proportion of earnings or a low one to the shareholders. In addition, some forces pull them (managers) to provide a stable and consistent dividend to the shareholders. Above all other forces want the managers to vary dividend from year to year.

Given the above position, it is most convenient for one to conclude that dividend policy formulation is not an easy responsibility for firms because of the role dividend policy plays. Therefore, it is assumed that Nigerian commercial banks do face challenges in taking dividend decision. The challenges are because of magnitude of interplay between the views and expectations of shareholders, other providers of capital and the interest of the firm in dividend policy formulation. Given the importance of dividend policy, attempt to understand the dividend behaviours of Nigerian commercial banks becomes so desirable to any curious mind. Thus, it is this fact that stimulates the interest to carry out the study, titled; *Dividend Behaviour of Deposit Money Banks: The Case of Nigeria*. The major hypothesis underlying this study includes;

HO₁: dividends of Nigerian commercial banks have no significant relationship with their earnings

HO₂: market values of Nigerian commercial banks have no significant relationship with their dividends.

LITERATURE REVIEW

Conceptual Clarifications

Dividend Policy

Dividend policy, according to Van Horne (1998), is the third major decision that a firm do make during its existence. He defined dividend policy as the percentage of earnings that is paid in cash to its shareholders. This percentage of earnings that is paid to shareholders as dividends is usually refer to as the payout ratio, while the percentage of earnings that the firm retained for its use is known as retention ratio. Ross et al (1995), observed in the following way the relationship between a firm and its shareholders as regard earnings; at first glance, it may seem obvious that a firm would always want to give as much as possible have to its shareholders by paying dividends. It might equally seem obvious, however, that a firm can always invest the money for its shareholders instead of paying it out. The heart

of the dividend policy question is just this: should the firm payout money to its shareholders, or should the firm take that money and invest it for its shareholders. Pandey (2000), gave the fact that the implication of paying dividends is that it involves the outflow of cash from a firm. Similarly, Van Horne (1998) explained that the payout ratio affects the total amount of internal finance available to a firm. This means that the higher the payout ratio, the higher the reduction in the amount of internal finance available to a firm vice versa. In view of this fact, he concluded that dividends decision should be considered in relation to the overall financing of a firm. This implies that dividend decision should not be isolated from investment and financing decisions of a firm. Similarly, Brealey (1992) threw more light on the concept of dividend policy when he posited that a company's dividend decisions are often mixed up with other financing and investment decisions. Some companies finance capital expenditure largely by borrowing, thus releasing cash for dividends. In this case the higher dividend is merely a by-product of the borrowing decision. Other companies pay low dividends because management is optimistic about the company's future and wishes to retain earnings for expansion. In this case, the dividend is a by-product of the management's capital budgeting decision... The precise question we should ask, then, is: "what is the effect of a change in cash dividends, given the firm's capital budgeting and borrowing decisions?" If we fix the firm's investment outlays, borrowing and operating cash flow, there is only one source of additional dividend payments: a stock issue. For this reason, I define dividend policy as the trade-off between retaining earnings on the one hand and paying out cash and issuing new shares on the other.

From the foregoing, we would like to define dividend policy simply as the benefit that a firm think is convenient to give to its shareholders from earnings in a given accounting year without jeopardizing its operations. Also, the fundamental question that needs to be asked is that: does the dividend policy of a firm have anything to do with its value? In other words, can the value of a firm be affected by changes in a firm's dividend policy? We cannot on our own here provide definite answer to the question above. This is because there are a lot of controversies surrounding dividend policy as regard its relationship with the value of a firm. Consequently, we would resort to make an overview of dividend theories, so that we should be guided before making any pronouncement.

Empirical and Theoretical Discussion

There are two schools of thought in respect to dividend policy. One School of thought believes that dividend policy of a firm has nothing to do with its value, while the other school of thought believes that dividend policy is an active variable in the determination of the value of a firm. Modigliani and Miller (M-M) (1961), as pointed out by Waston and Head (1998), argued that the value of a firm is a function of the earnings it generates and such earnings depend on the investment policy of the firm. They added that investment decisions that take care of the future profitability of a firm are the only determinants of its market value. From the point of view of M-M, the value of a firm is independent of the level of its dividend-payout ratio. They went further to argue that rational investors always make the choice that maximises their utilities and therefore, they are indifferent to receive capital gains or dividends on their shares. As Brigham (1989) highlighted, M-M based their position on some assumptions which include absence of taxes, no stock floating or transactions cost, capital structure has no effect on the cost of capital, managers and investors have the same information about the firm's prospects, that the distribution of earnings into dividends and retained earnings has no effect on the cost of capital and a firm's capital budgeting policy is independent of its dividend policy. From the point of view of M-M, there is nothing like optimal dividend policy if a firm operates under a perfect capital market. Therefore, a firm can afford to give or not to give any portion of its earnings as dividends. In explaining this position of M-M, Pandey (2000) gave three hypothetical situations about a firm operating under a perfect capital market, namely:

- (i) The firm has sufficient cash to pay dividends.
- (ii) The firm does not have sufficient cash to pay dividends, and therefore, it issues new shares to finance the payment of dividends.
- (iii) The firm does not pay dividends, but shareholder needs money.

In the first situation, he posited that, if the firm pays dividend, the value of the firm is reduced by the amount of cash given to the shareholders. Therefore, the cash the shareholders benefited has led to a proportionate reduction in their claims against the firm. There is no gain or loss in the transaction; this is because it is just a transfer of wealth from one pocket to another pocket of the shareholders. Thus, the value of the firm remains unaffected. Under the second situation, he explained that when the firm financed dividends through new issues of shares, two situations would emerge. First, the existing shareholders get cash in the form of dividends, but they suffer proportionate loss in terms of reduction in their claims against the assets of the firm. On the other hand, the new shareholders gave out cash to the firm in exchange for new shares at what is termed “fair price.” The fair price is the price per share before dividends net of dividend per share. The summary of this situation is that the existing shareholders gave part of their claim in the form of new shares, to the new shareholders in exchange for cash. There is no gain or loss in this situation, thus the value of the firm remains the same at the end of the transactions. The third situation, which is a situation whereby the firm does not pay dividends, but a shareholder needs cash, he stated that the shareholder has an option to create a “home made dividend.” This will be possible for the shareholder by selling a part of his or her shares at the prevailing price at the capital market in order to obtain cash. There would be a reduction in the number of shares owned by the shareholder. This is because he or she has transferred some of his or her shares to a new shareholder in exchange for cash. Consequently, the value of the firm is not affected by the transaction.

However, Lintner (1963) and Gordon (1963), as mentioned by Brigham (1989), strongly argued against the position of M-M. They contended that the cost of capital increases as the dividend-payout ratio is reduced, because the investors are less certain about the realisation of capital gains that retained earnings will produce. Whereas investors are more certain about the current dividends they are to receive. Walter (1963), justified the fear of investors about the issue of reinvesting earnings to produce capital gains this way by suggesting that; the one thing that shareholders cannot do through their purchase and sale transactions is negate the consequences of investment decision by management. Against this somewhat rational perception of the investors, Walter was of the same opinion with Linter and Gordon, that investors prefer dividends to capital gains. Similarly, Graham and Dodd (1934), as quoted in Pandey (2000), gave a strong argument in favour of the position that investors prefer dividends to capital gains when they emphasized that; the typical investor would most certainly prefer to have his dividend today and let tomorrow take care of itself. No instances are on record in which the withholding of dividends for the sake of future profits has been hailed with such enthusiasm as to advance the price of stock. The direct opposite has been invariably true. Furthermore, Walter (1963), as pointed out by Pandey (2000), developed a model that produces the importance of dividend policy in relation to the value of the firm. The model shows the importance of relationship between the firm's rate of return (r) and it's cost of capital (k) in determining the dividend policy that will lead to the best maximisation of the shareholders' wealth. The model is based on the following assumptions:

- (i) The firm depends solely on retained earnings to finance all its investment.
- (ii) The firm enjoys constant rate of returns (r) and cost of capital (k).
- (iii) The firm practice either one hundred percent payments or retention.
- (iv) The firm maintains constant earnings per share (EPS) and dividends.
- (v) The firm has a large or infinite life span.

Given his (Walter's) Model, the market price per share of the firm is given as

$$P = \frac{DIV + (r/k)(EPS - DIV)}{k}$$

where: P = Market price per share
DIV = Dividend per share

| | | |
|-----|---|---|
| EPS | = | Earnings per share |
| r | = | Firm's rate of return (average) |
| k | = | Firm's cost of capital or capitalisation rate |

Given the above formula, Walter arrived at some conclusions as follows:

- (i) For a growth firm that its internal rate of return (r) is normally more than its opportunity cost of capital (k), the best dividend policy for the firm in order to maximise the value of its share is to retain all its earnings for internal investment. This is because the market value per share (p) increases as the payment ratio declines.
- (ii) For a normal firm which its rate of return (r) is always equal to its opportunity cost of capital (k), the firm can employ any dividend policy and the market value per share of the firm will remain unchanged at any given payment ratio.
- (iii) For a decline firm, which its rate of return is always less than its opportunity cost of capital, the best dividend policy for the firm is to pay all its earnings as dividend, this is because the value of the firm usually increases as the dividend payout ratio rises.

Similarly, Gordon (1962) as explained by Pandey (2000), developed his own model to prove the relevance of dividend policy to the firm. His model is based on the following assumptions:

- (i) The firm is an all-equity firm, which means that it does not use debt as part of its financing.
- (ii) No external financing, therefore examined earnings is solely used to finance any expansion.
- (iii) The firm enjoys constant rate of return.
- (iv) The firm enjoys constant cost of capital.
- (v) The firm enjoys perpetual stream of earnings.
- (vi) Corporate tax does not exist.
- (vii) Constant retention by the firm.
- (viii) Cost of capital is always greater than growth rate.

Given his model, the market price per share of the firm is given as: -

$$P_0 = \frac{EPS_1(1-b)}{k-br}$$

| | | |
|-------------------------|---|--|
| Where: EPS ₁ | = | Expected earnings for say period one |
| b | = | Dividend policy (i.e., retention ratio) |
| r | = | Internal profitability or rate of return |
| k | = | Cost of capital |

Given the above formula for his model, Gordon arrived at the same conclusions with Walter about the dividend policies of growth firm, normal firm and decline firm. It is important to point out that many of the assumptions of these two erudite scholars of finance in the pursuit of their models were not without shortcomings in relation to the world reality. In other words, many of the underlying assumptions of their respective models are not obtainable in practice. Therefore, one cannot derive much logical conclusions about the effect of dividend policy on the value of the firm from the works of these two scholars. The M-M christened the argument of Lintner and Gordon as a "bird in-the-hand" fallacy. Anyway, which of these two theories are we to believe? Brigham (1989) portrayed that several empirical tests have been carried out to ascertain the validity of these theories, however, contradictory findings in respect to each of the theories have made conclusive pronouncement impossible. On the part of the researcher, it is important to state here that the scholarly prowess of M – M as regard their argument about dividend policy is well appreciated. However, the fact that the underlying assumptions upon which their argument is based run contrary to what is obtained in the real-world situation has put a big question mark on their argument. Thus, given the real-world situation, it is compelling to buy the idea that dividend policy

affects the value of a firm. However, it is believed that the extent to which dividend policy may affect the value of a firm is still an open question. This is because there are other variables other than dividend policy that equally have influence on the value of a firm.

Dividend policy is considered important because of the information dividends convey to the investors. Pandey (2000) gave the view that dividends are considered relevant because of their informational value. He opined that a firm might make pronouncements about its expected earnings growth to give assurance to the shareholders as well as winning their confidence. However, he added, the pronouncements would be taken with all seriousness by shareholders if they are following with dividends. Solomon (1963), as quoted by Pandey (2000), posited that in an uncertain world in which verbal statements can be ignored or misinterpreted, dividend action does provide a clear-cut means of 'making a statement' that speaks louder than a thousand words. Furthermore, Brealey and Myers (1996) opined that the fact that dividends anticipate future earnings, that is the prospects of a firm, dividend cuts would be interpreted by investors as a bad omen, while dividend increases are considered by them as a good omen. Consequently, announcement of dividends cuts would affect the market price of a firm's shares, negatively. On the other hand, announcement of increases in dividends tend to have positive impact on the market value of a firm's shares. However, Woolridge and Ghosh (1992), argued that dividends cuts may be perceived as management's loss of confidence in the future earnings of the company. Investors may react negatively towards investing in the company. But they further stressed that dividend cuts can be good news in the sense that it may mean more funds need to be invested in the company to bring about future prosperity. Pandey (2000) gave the opinion that not all changes in dividend policy have much impact on the value of a firm. He said the extent of message conveyed by dividend action depends upon the established dividend policy of the firm. A change in a long-established dividend policy would have much impact on the market price of a firm, while a policy of changing dividends with every cyclical change in earnings would have less impact on the market price of a firm. This is because the investors understand very well the informational values of the two situations. By and large, we can infer from the above analysis that the informational value of dividend is maximised through a stable dividend policy over years.

METHODOLOGY

This research is descriptive in nature, because focused on what are behaviours of dividend policies of Nigerian commercial banks vis-à-vis their earnings and market values. The population of the study consist of 22 licensed commercial banks (excluding Jaiz bank) in Nigeria as at date. Random sampling technique was employed in selecting the banks used in this study. This means that the banks elected were done on random basis to avoid bias in our selection through a dip of the luck system. The sample size of the study is 6 Nigerian commercial banks. The 6 selected banks were from 12 Nigerian commercial banks quoted on the Nigeria Stock Exchange. The banks selected for the study include Access Bank, First City Monument Bank, First Bank, Guaranty Trust Bank, United Bank for Africa and Zenith Bank. None of the unquoted 10 of the commercial banks was selected in order to avoid share price determination problem.

Only secondary data was used for this study. The data used include the earnings, dividends and market values of the selected banks. The share values of the banks were obtained from the Nigeria Stock Exchange while their earnings and dividends were obtained from the annual financial statements of the banks. The methods of data analysis employed in this study include descriptive statistics and parametric statistics. Descriptive statistics involves the use of table, frequency, percentage and mean. Under the parametric statistics, we used the Pearson product-moment correlation coefficient (r) in statistical tests. The formula for " r " is:

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where: N = the number of pairs of variables X and Y .

X = this refers to the respective values of the
Independent variable.

Y = this refers to the respective values of the
Dependent variable.

Σ = This refers to sum of.

The formula above is used to obtain the r computed. The table value of r_{α} would be obtained from the significant value of the correlation coefficient Table, given a Degree of Freedom (DOF) and an earlier chosen level of significance. The DOF is always given as $N-2$ (i.e., the number of pairs of variables X and Y minus 2). The level of significance refers to the maximum degree of error that a researcher is willing to tolerate in taking decision that is based on statistical test. The level of significance is usually denoted by alpha (i.e., α), the first letter of the Greek alphabet. For the purpose of this study, 1% or 0.01 is chosen as our level of significance (α). This means that we strongly believe that we anticipated 1% chance of rejecting the null hypothesis (H_0) instead of accepting it. In other words, our maximum error of accepting alternative hypothesis (H_1) instead of null hypothesis (H_0) is 1%. Impliedly, we are saying that we are 99% confident that a right decision will be made in respect of each statistical test. Any chosen level of confidence is usually known as confidence interval.

RESULT AND DISCUSSION

Test of Hypotheses

Two hypotheses were tested during the study. The hypotheses are stated as follow. In respect to the first hypothesis, the null (H_0) stated that there is no significant relationship between the earnings and dividends of Nigerian commercial banks, while the alternative (H_1) stated that there is a significant relationship between the earnings and dividends of Nigerian commercial banks. As to hypothesis two, the null (H_0) stated that there is no significant relationship between the dividends and market values of Nigerian commercial banks, while the alternative (H_1) stated that there is a significant relationship between the dividends and market value of Nigerian commercial banks.

Test of Hypothesis One

| COMPUTATION TO TEST TEST OF HYPOTHESIS 1 | | | | | | |
|--|--------|---|----------------|----------------|--------|--|
| YR | EPS | DPS | | | | |
| | X | Y | X ² | Y ² | XY | |
| 2011 | | | | | | |
| 2012 | 4.13 | 3.4 | 17.06 | 11.56 | 14.04 | |
| 2013 | 12.97 | 5.5 | 168.22 | 30.25 | 71.34 | |
| 2014 | 11.96 | 5.95 | 143.04 | 35.40 | 71.16 | |
| 2015 | 13.27 | 4.55 | 176.09 | 20.70 | 60.38 | |
| 2016 | 11.77 | 4.77 | 138.53 | 22.75 | 56.14 | |
| 2017 | 14.44 | 5.74 | 208.51 | 32.95 | 82.89 | |
| 2018 | 17.35 | 7.25 | 301.02 | 52.56 | 125.79 | |
| 2019 | 20.56 | 7.1 | 422.71 | 50.41 | 145.98 | |
| 2020 | 21.74 | 7.57 | 472.63 | 57.30 | 164.57 | |
| | 24.09 | 4.5 | 580.33 | 20.25 | 108.41 | |
| | 152.28 | 56.33 | 2628.15 | 334.14 | 900.69 | |
| Source: NSE & Annual reports of the bank | | | | | | |
| r = | ✓ | $\frac{N\sum XY - \sum X \sum Y}{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}$ | | | | |
| | ✓ | $\frac{(10 \times 900.69) - (152.28 \times 56.33)}{[(10 \times 2628.15) - 23189.20][(10 \times 334.14) - 3173.07]}$ | | | | |
| | ✓ | $\frac{9006.9 - 8577.93}{[(26281.5 - 23189.20)][(3341.4 - 3173.07)]}$ | | | | |
| | ✓ | $\frac{428.97}{3092.3 \times 168.33}$ | | | | |
| | ✓ | $\frac{428.97}{520526.9}$ | | | | |
| | ✓ | 0.000824 | | | | |
| r = | | 0.0287 | | | | |

Given the information that:

The Degree of Freedom (DF) = N - 2

$$= 10 - 2$$

$$= 8$$

and the level of significance (i.e., α) = 0.01,

the table value of **r = 0.764592**.

Interpretation of Result

Since the value of r computed (i.e., 0.0287) is less than the table value of r (i.e., 0.764592) then a significant correlation has been established. Therefore, we reject the null hypothesis and accept the alternative hypothesis, which says that the dividends of Nigerian commercial banks have significant relationship with their earnings.

Test of Hypothesis Two

| COMPUTATION TO TEST TEST OF HYPOTHESIS 2 | | | | | | |
|--|----------|---|--------------|----------------|-----------------|----------------|
| | | DPS | MPS | | | |
| | YR | X | Y | X ² | Y ² | XY |
| | 2011 | 3.4 | 45.26 | 11.56 | 2048.47 | 153.88 |
| | 2012 | 5.5 | 72.99 | 30.25 | 5327.54 | 401.45 |
| | 2013 | 5.95 | 91.13 | 35.40 | 8304.68 | 542.22 |
| | 2014 | 4.55 | 64.98 | 20.70 | 4222.40 | 295.66 |
| | 2015 | 4.77 | 46.69 | 22.75 | 2179.96 | 222.71 |
| | 2016 | 5.74 | 54.86 | 32.95 | 3009.62 | 314.90 |
| | 2017 | 7.25 | 97.42 | 52.56 | 9490.66 | 706.30 |
| | 2018 | 7.1 | 81.84 | 50.41 | 6697.79 | 581.06 |
| | 2019 | 7.57 | 73.45 | 57.30 | 5394.90 | 556.02 |
| | 2020 | 4.5 | 84.73 | 20.25 | 7179.17 | 381.29 |
| | | 56.33 | 713.4 | 334.14 | 53855.18 | 4155.48 |
| | | Source: NSE & Annual reports of the bank | | | | |
| r = | ✓ | $\frac{N\sum XY - \sum X \sum Y}{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}$ | | | | |
| | ✓ | $\frac{(10 \times 4155.48) - (56.33 \times 713.35)}{[(10 \times 334.14) - 3173.07][10 \times 53855.18) - 508868.22]}$ | | | | |
| | ✓ | $\frac{41554.8 - 40183.01}{[(3341.4 - 3173.07)][(538551.8 - 508868.22)]}$ | | | | |
| | ✓ | $\frac{1371.79}{168.33 \times 29683.58}$ | | | | |
| | ✓ | $\frac{1371.79}{4996637}$ | | | | |
| | ✓ | 0.00027 | | | | |
| r = | | 0.0166 | | | | |

Given the information that:

The Degree of Freedom (DF) = N - 2

$$= 10 - 2$$

$$= 8$$

and the level of significance (i.e., α) = 0.01,

the table value of **r = 0.764592**.

Interpretation of Result

Since the value of r computed (i.e., 0.0166) is less than the table value of r (i.e., 0.764592) then a significant correlation has been established. Therefore, we reject the null hypothesis and accept the alternative hypothesis, which says that the market values of Nigerian commercial banks have significant relationship with their dividends. From the result, dividend decision should be seeing as a critical finance function in the Nigerian banking industry.

Discussion of Findinds

The researcher discovered that there is a positive significant relationship between dividend policies and earnings of Nigerian commercial banks. This means that the Nigeria banks have ma king industry might be practicing fluctuating dividend policy in their annual dividend decision making. By implication, dividends might often be paid from current earnings alone and there may be no effort to smoothen their dividend payments in order to achieve stable dividend policy. Furthermore, we established there also that

there is a positive significant relationship between the market values and dividends of Nigerian commercial banks. This means that appreciation in their market values could be highly influenced by their dividend policies. This means poor dividend decision by Nigerian commercial banks could lead to poor or downward market values their shares. These realities could put pressures on banks. Given the foregoing, the following recommendations are being put forward.

- i. Nigerian commercial banks should ensure they always achieved improved financial performance yearly to enable them meet up current year dividend payments as well as build up retained earnings that could be used to offset dividends payments in bad years. By so doing they could achieve stable dividend policy.
- ii. Nigerian commercial banks should reduce their reliance on internal source of finance in order to have adequate liquidity capacity to meet up dividend payments as at when due and not just declared dividends and no payments.

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Consequences of Covid-19 Pandemic Jailbreaks in Correctional Institutions on the National Security Architecture of Nigeria

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Abstract

This research seeks to highlight the Consequences of Covid-19 on Jailbreak in Nigeria Correctional Institution as a threat to national security, analyse the dynamics and situate the research within the challenges of the novel Corona Virus, suggesting how COVID-19 may also influence the problems under investigation. Central to thematic preoccupation of the present discourse is the fundamental problem of jailbreak in Nigeria Correctional Institution. Using both quantitative and non-quantitative approach, to collect relevant data for the study, the research got to the roots of the critical issues surrounding jailbreaks in Nigeria: the causes, dialectics, dimensions, dynamics, modus operandi and consequences of jailbreak in Nigeria Correctional Institution. In answering the extent to which the challenges of the novel Corona Virus discourse otherwise known as COVID-19 influences negatively or positively, the resolution of the problems under investigation, the researcher argues that this work is a scientific investigation even though the scientificity is not premised on excessive mathematization. All the issues raised and questions posed are diligently resolved with a mind attuned to analytical inquiry. Frustration-Aggression theory by was used, to underpin this research effort because, it argues that when individuals are frustrated by discriminatory or preferential treatment and adverse social conditions, aggression evolves in the form of collective violence, which can result to jailbreak and the study concluded that given the issue of delay in Criminal Justice System with adverse consequences for inmates awaiting trial; as well as the twin problem of congestion and poor welfare services in most correctional centers in developing countries, a salient conclusion to be drawn is that the essence of law should not be to punish offenders but to ensure that no one grows up a criminal. The study therefore recommended that there is the urgent need in Nigeria to develop socially constructive alternatives to custodial sentences, such as Restorative Justice and other Alternative Dispute Resolution Mechanisms especially for minor and first offenders.

Keywords: COVID-19, Jailbreak, Security, National Security

INTRODUCTION

Jailbreak in the Nigeria Correctional Institution has suddenly become a source of internal security threat. Correctional Institution facilities in Maiduguri, Kano, Bauchi, Enugu, Koton karfe, Oko among others have in recent times been attacked and a number of hardened criminals got released into the society. In recent times, jailbreak in the Nigerian Correctional Institutions has become recurrent phenomena. For instance, on the 2nd of January, 2013 about 20 inmates escaped from a secured Correctional Institution in Sagamu, and on 15th February 2012 Boko Haram attacked Koto-Karfi Correctional Institution in Kogi State, releasing about 119 Awaiting Trials Persons (including Boko Haram suspects). Other examples of jailbreak in the Nigerian Correctional Institutions include: The February 2004 riot in Ikoyi Correctional Institution, the Port Harcourt Correctional Institution attack of 2005 and Onitsha Correctional Institution attack of the same year. On 6th September 2007 riots occurred in Kano Correctional Institution and on 8th September 2007 riots occurred at Agodi Correctional Institution in Ibadan. On Wednesday 3rd June, 2009 about 150 inmates broke jail at Enugu prison. On 20th of April, 2010 Kaduna prison experienced jailbreak; and the Boko Haram attacked Bauchi and Maiduguri prisons in 2010 and 2011 respectively, to mention a few.

The Traditional Criminal Justice System in its effort to achieve public safety has for years tenaciously held to the notion that ‘tough on crime’ involves an effective system of incarceration, and that this alone would address any and all issues we have with social problems like Correctional Institution Congestion. The standing belief by many commentators and the public was that the punitive aspects of imprisonment would deter further crime and effectively hold offenders accountable for their decision to commit crime (Downen, 2011). The living conditions in Nigeria Correctional Institutions have been termed horrifying,

with little to no hope for anyone unlucky enough to find themselves in there. Unsurprisingly, these classes of people are usually the less privileged in society, as wealthy citizens tend to escape incarceration and the deplorable aftermath involving the violation of human rights on different levels. Crime is a social and moral turpitude. It is a bane of the society, which requires the application of justifiable coercions to prevent and control. For this reason, punishment or treatment from the traditional criminal system as an act of fighting crime or subjection of an offender to expiation and penitence becomes necessary. Nonetheless, it is imperative and always ideal to try as much as possible to resolve victim-offender differences, correct antisocial conducts and heal the 'wound' (violation of law without justification) done to the 'collective sentiment' (core norms and values, law) using alternatives to institutional confinement.

LITERATURE REVIEW

Conceptual Clarifications

Concept of Security

No society can have any significant development without effective security in place. The main purpose for the legitimacy and existence of a state is to ensure a safe and secured environment for life and property of its citizen and the absence of fear, oppression, poverty, anxiety and possible danger. There are divergent definitions of the term security based on the concern of the stakeholders. A layman definition of security is the protection of lives and property of a person and the society. In contemporary time, definition of security goes beyond the traditional military ways of protecting the state against internal and external aggression. The fact is that since the end of the cold war, security management has assumed a new dimension, external threat to security resulting from international hostilities and aggression that characterized the cold war era has been replaced with nontraditional security threats like information warfare, drug trafficking, nuclear pollutions, disease epidemics like Health challenges, corruption, human trafficking, (internal) insurgency among others. Achumba et al (2013) defined the concept of security as the establishment of precautionary measures for the protection of persons, property and information against criminal elements, persons and actions. These measures are designed to ensure people can move around for their daily business activities without any fear of any violent occurrence.

And thus, to some, security can be defined as: An all-encompassing condition in which individual citizens live in freedom, peace and safety; participate fully in the process of governance; Enjoy the protection of fundamental rights; have access to resources and the basic necessities of life; And inhabit an environment which is not detrimental to their health and wellbeing (see South Africa White Paper on Defense, 1996). Not only in terms of the internal security of the state, but also in terms of secure systems of Food, Health, Money and Trade (Tickner, 1994:180). The researcher totally agreed with Achumba et al (2013) that defined the concept of security as the establishment of precautionary measures for the protection of persons, property and information against criminal elements, persons and actions.

Types of Security

It is against this background that it is pertinent to discuss various types of security, to stimulate our better understanding of the subject. They include the following:

- i. **Food Security:** This underscores the strategic importance that self sustenance in food production has on the security of any nation. Though, the interdependence that dominates relations among nations also covers food. This is because there are particular types of agricultural items that cannot be acculturated in one country or the other. Notwithstanding, some normal food items like rice, millets and others need to be made available to the people, even at cheap rate, because food is no luxury but a necessity. Secure society will always adopt strategy to produce its food locally, trying as much as possible to avoid importing the food items it can produce locally. Nigeria began to experience deepened crisis and insecurity since the emergence of oil boom in the 1970s, when our problem was not basically how to generate funds but how to spend it.

- ii. **Health Security:** This involves safety against Health pandemic and other diseases like malaria that accounts for a very high mortality rate. It is part of government responsibilities to provide health security for its citizens, knowing the impact that good health condition(s) can have on the development of any country. In addition, most governments usually have some strategic interventions to respond to pandemics. One of such interventionist techniques is awareness programme by educating the people about the danger of the outbreak of some diseases particularly those that are infectious like Corona Virus, SARS, and Tuberculosis among others.
- iii. **Physical Security:** It describes security measures that are designed to deny unauthorized access to facilities, equipment and resources and to protect personnel and property from damage or harm (such as espionage, theft, or terrorist attacks). Physical security involves the use of multiple layers of interdependent systems which include CCTV surveillance, security guards, protective barriers, locks, access control protocols, and many other techniques. Physical security is also the protection of personnel, hardware, software, networks and data from physical actions and events that could cause serious loss or damage to an enterprise, agency or institution.
- iv. **Economic Security:** This can be described as a way of putting in place measures and strategies that will ensure that every individual in the state is not only entitled to employment but also has the right to a living wage. In advanced countries, government often puts in place social security for citizens who are out job, in which stipends are provided for the citizens to keep body and soul together. But, it is quite unfortunate that in most developing countries, unemployed people are left to their own fate, such that nothing is done to ameliorate any economic misfortune being experienced by the citizens. The people who have jobs don't have any job security as several employees are cheated and underpaid by their employers. This situation has therefore been one of the major factors responsible for the increasing criminality and criminal activities among the people especially the youths.
- v. **Environment Security:** The concept of environment has begun to dominate international discourse. The issue of environmental pollutions has continued to attract attention among the individuals, Non-Governmental Organizations (NGOs), nations as well as international organizations. Within the world body (the United Nations), efforts are being made through its relevant agency – the United Nations Environment Program (UNEP), to monitor environmental issues, and make reports and plans for such issues and to act and promote legal instruments on environment. By and large, environment can be described as the total surrounding or external conditions within which an organism or a community exists” (Adeboyejo, 1994: 74).
- vi. **Personal Security:** This is type of security which involves protecting every individual from any physical violence. Therefore both the state and other entities like any other people or group or people, member(s) of the person's immediate family are barred by the law to carry out any action(s) that can cause injury or death against that individual. Here the individual is protected against domestic and non-domestic violence. Personal security also prevents the individual from physical aggression against himself or herself. He/she is therefore not allowed to cause injury (deliberately) against himself/herself. And the issue of killing oneself is regarded by the law as a criminal offence.
- vii. **Community Security:** This form of security creates the need to respect traditional relationships and social values of the people by protecting the people from losing such communitarian values. Therefore several international and national institutional frameworks are put in place to ensure freedom of the people to association (s) and do not constitute a security threat, religion etc; and no violence should be directed to him/her by another person or group of person.

- viii. **Territorial Security:** This denotes protecting the state against any internal and external aggression. This is one aspect of the United Nations mandate, which the world body has found crucial to the maintenance of global peace and security.

Concept of Jailbreak

A Jailbreak is the act of an inmate leaving prison through unofficial or illegal ways. Normally, when this occurs, an effort is made on the part of authorities to recapture them and return them to their original detainers. Escaping from Correctional Institution is also a criminal offense and it is highly likely to result in time being added to the inmate's sentence, as well as the inmate being placed under increased security. Many escapes have been successfully conducted by inmates who have invented their own methods. Weaknesses that are found as prisoners escape are often corrected at numerous Correctional Institutions around the world, in order to prevent future escapes in a similar manner. This led inmates to finding new ways. Since prisoners usually have a lot of time in which they are doing nothing, this gives them plenty of time to think, allowing them to devise plans and figure out ways to escape. Adelani (2018), posited that over 1,133 prison inmates who escaped from various prisons in the past seven years are still on the loose, investigations by our correspondent have revealed. Checks showed that the Nigerian Correctional Service and other security agencies had been unable to track down and arrest the fleeing inmates, many of whom were members of the Boko Haram insurgent group who escaped during jailbreaks between 2010 and 2017. Some of the Correctional Institutions that have recorded jailbreaks include facilities in Borno State, Kano State, Bauchi State, Ondo State, Niger State, Enugu State, Ogun State, Kogi State, Edo State and Abuja.

Methods of Jailbreak

The following are methods that have commonly been used by prisoners in escapes. In some instances, a combination of this is used;

- i. **Failure to return:** Some lower security inmates are permitted to leave prison grounds temporarily on the honor they will return. These include those who depart for employment outside the facility or furloughs that allow time outside for periods of time.
- ii. **Escape from outside:** Breaking while in custody outside facility grounds. Prisoners are often transported for work duties, to be moved between facilities, attend court hearings, for hospitalization and medical appointments, and other reasons.
- iii. **Cell escape:** While some prisoners are allowed out of their cells at times, others remain locked in their cells most of the time, particularly those in solitary confinement. Many prisoners who are kept in their cells must find ways out of the cells. Even those who are allowed out of their cells at times still have plans that involve escape from their cells. Cell escapes occur through the door, the window, the light, the ventilation system, by breaking down the walls, or by tunneling underground. Some prisoners have escaped by picking the locks on their cells, creating keys to their cells, sawing bars off of the doors or windows, carving away the walls, or breaking away the vent.
- iv. **Physical force:** Attacking guards with blunt force, homemade weapons, smuggled weapons, or weapons stolen from overtaken guards. Some escapes involve one or more inmates taking over an entire unit or section of the prison, subduing guards, and stealing weapons or other objects they can use to their advantage.
- v. **Deception:** Deception may involve fooling one or more guards into believing the prisoner is authorized to depart prison grounds for a legitimate reason, or the prisoner disguising himself or herself as a worker or civilian who can exit prison grounds without arousing suspicion, or the creation of a ruse to mislead guards. In some escapes, inmates construct makeshift dummies to make guards believe they are in their cells, usually in bed, when they are not.

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- This enables the inmate to gain a head start from the prison before guards discover they are actually missing. Such dummies are typically constructed quite crudely, often using the inmate's or another's hair, shoes, and miscellaneous materials for stuffing, hidden under a blanket to give the appearance a body is present.
- vi. **Exploitation of weaknesses:** Finding holes in the security of the facility, and taking advantage of them. This may include the discovery of overlooked security issues, or taking advantage of guards who are not following policies or procedures, or are otherwise not doing their jobs properly.
 - vii. **Exploitation of corruption:** Taking advantage of intentional wrongdoing on part of prison staff. This may include the use of weapons or other contraband smuggled in by staff, or receiving assistance from staff who believe in that inmate's freedom and willingly assist.
 - viii. **Outside help:** Receiving aid from an accomplice outside prison walls, including those who provide a ride to the inmate following their penetration, smuggle in contraband as visitors, use helicopters, among other methods. When a banned item is smuggled, it can either be slipped through or tossed over the fence from outside, hidden in a gift to the inmate that is legal, or slipped past corrupt security officers. In some cases, the staff are the source of the smuggling themselves.
 - ix. **Strength penetration:** Breaking down or slipping through the physical containment of Correctional Institution, including that of the cell itself or the surrounding complex. Methods include destruction of the cell or compound walls, squeezing through tight spaces, or entering off-limits areas. Prisoners often destroy their containment with homemade tools, smuggled objects, or other contraband. Most Correctional Institutions are contained on the outside by one or more fences, often topped with barbed wire or razor wire. Escapees manage to scale these fences successfully or cut holes in the fences, damaging them. These fences are also watched by one or more guards from a tower, but escapees manage to pass the fence when the guard is turned away, unable to see in the dark, or sleeping on the job. Outside the fences is often a perimeter patrol conducted by an officer in a vehicle, which stands as the final line of defense. Escapees manage to evade this by studying the length of time between passes or waiting until it is on the other side or using the cover of darkness. A rare method that has been used at times involves the digging of a tunnel under the facility that exit outside the facility.
 - x. **Escape from Island prisons:** Escaping from an island prison brings another challenge of crossing the water to free land. This can be done by construction of a makeshift raft or receiving outside help from the owner of a boat. In the famed 1962 Alcatraz escape, a makeshift raft from raincoats was confirmed. One additional theory is that a boat was used to transport them in the water.

Consequences of Jailbreaks in Nigeria Correctional Institutions

Below are the consequences of Jailbreaks in Nigeria Correctional Institutions:

- i. There are significant repercussions for the inmates when they are eventually caught and returned to Correctional Institution.
- ii. In addition to a loss of privileges, commissary and recreation or "yard time," most of these escapees will be punished with time spent in solitary confinement, better known to those inside as "the hole."
- iii. While solitary confinement may mean different things at different institutions, the overall point is that an inmate is housed in a cell by himself, without contact from the outside world, prison staff or other inmates. Most types of solitary confinement require meals be eaten inside the cell, with inmates having little or no time outside the cell.

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- iv. In addition, televisions, radios, and other forms of contact with the outside world tend to be prohibited. It is an existence similar to that experienced by inmates on death row.
- v. Inmates who escape also face new charges. If the escapee was a sentenced prisoner, or was currently charged with a felony, he will be charged with escape as a third degree felony.

Concept of National Security

Security could be magnified to consider national security and defense of a state. Section 14 (2) (b) of 1999 Constitution of the Federal Republic of Nigeria on the Fundamental Objectives and Direct principles of state policy provides that “security and welfare of the people shall be the primary purpose of government”. In view of this, the following definitions of national Security shall be stated and examined within the context of this seminar. Gbanite (2012) defines national security as the ability of the state to successfully pursue her national interests, protect her core values and be able to achieve victory in case of a war. He further noted that if the individual was not secured, the state cannot be secured and if the state is under attack from an external or internal source, the state and the individual cannot be secured. This view perceives national security from the traditional threats and the protection of national interest through the use of military force.

Azazi (2012) defines national security as the maintenance of the survival and prosperity of a nation through the protection of the personal, physical, economic, social, resource, environmental, food, natural borders and other threats to quality of life and state survival. Dick-Iruenabere (2014) also agrees with this view when he identified national security to include not only military security against foreign invasion, but also include food, economic, environmental, domestic order, educational, old-age and natural disaster security. This perspective of national security adequately encapsulates the perspective of this thesis. "National security then is the ability to preserve the nation's physical integrity and territory; to maintain its economic relations with the rest of the world on reasonable terms; to preserve its nature, institution, and governance from disruption from outside; and to control its borders." (Harold Brown, United States Secretary of Defense, 1977-1981). Azazi's definition of national security is therefore adopted for the study. Azazi's definition captures the broad view of national security which could be influenced by military and non-military factors arising from within or outside a nation. The concept of national security remains ambiguous, having evolved from simpler definitions which emphasized freedom from military threat and from political coercion.

Theoretical Discussion

In view of the above discourse, Frustration-Aggression theory' by (Berkowitz 1968) was adopted. He argues that when individuals are frustrated by discriminatory or preferential treatment and adverse social conditions, aggression evolves in the form of collective violence and riots. Though this paper will attempt to account why jailbreak occur in Correctional Institutions, their occurrence and why individuals participate in them could be a very complex exercise and differentiated phenomenon. However, from the above theoretical review, this author can argue that, social conditions are important, but individual greed, administrative laxity and criminal activities (within and outside Correctional Institutions) can also explain jailbreak in our Correctional Institutions to a very high extent.

METHODOLOGY

This study adopted an exploratory grounded approach as it allows determining the sequence of necessary steps and tasks in the process of conceptualization and identification of relations between concepts in assessment of the consequences of Covid-19 Pandemic Jailbreaks in Correctional Institutions on the National Security Architecture of Nigeria. Corbin and Strauss (1990) argued that qualitative methods could be systematically evaluated only if procedures and canons are made explicit. They have proposed canons of a 'good science' as a procedure that should be followed to help a researcher to develop a well-integrated set of concepts, which will provide the theoretical explanation of social phenomena under study. Since the literature on Covid-19 Pandemic Jailbreaks in Correctional Institutions on the National

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Security Architecture of Nigeria have already recognized several core concepts that resulted from analysis, the canons of exploratory approach here aims at serving as a tool for extending and as well understanding relations between concepts. Hence, some of the tools utilized are assessment and observation. This helps in objectively, reviewing research work done by other researchers in the field of security architecture. It is a qualitative method that looks in-depth at non-numerical data to explain the analysis of Covid-19 Pandemic Jailbreaks in Correctional Institutions on the National Security Architecture of Nigeria.

RESULT AND DISCUSSION

COVID-19 is a disease caused by a new strain of corona virus: 'CO' stands for corona virus; 'VI' stands for virus; 'D' stands for disease. Formerly, this disease was referred to as 2019 corona novel virus or 2019-nCoV. The COVID-19 virus is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold. These are expert opinions. The outbreak of corona virus disease (COVID-19) has been declared a Public Health Emergency of International Concern (PHEIC). The virus has now spread to many countries and territories. While a lot is still unknown about the virus that causes COVID-19, experts tell us that it is transmitted through direct contact with respiratory droplets of an infected person generated through coughing and sneezing. The Reformative, Reintegrative and Rehabilitative epistemology of Correctional Institution has been highlighted in this research. Furthermore, the dialectics, dimensions and dynamics of jailbreak have also been highlighted. Now, how does the problematiquess of COVID-19 come into play in these analytical inquiries? First and foremost, what is COVID-19? Corona Virus Disease, an acute respiratory health problem which became pronounced in Wuhan, China, in December 2019, spread across the world, declared a pandemic and code-named COVID-19, right now affects, virtually everything, every institution in the world. Every country is affected with over 144 nations having experienced lockdown. World Health Organisation (WHO) has released a preventive protocol which includes: Encouraging those frequently coughing and sneezing to stay at home, Discouraging unnecessary trips and travels, Encouraging people to stay at home as much as possible, Frequently disinfecting all surfaces. Hand washing protocol and use of hand sanitizer, avoiding crowds, Avoiding touching the eyes, nose and mouth, Physical distancing, and the use of face masks. In relation to a Correctional Institution and the problematics of jailbreak, some salient issues are raised:

- i. If a Correctional Institution cannot keep to all these protocols, both workers and the inmates may be afraid of their lives. Fear, tension, anxiety and feelings of uncertainty may set in, which can cause jail break.
- ii. Many staff may become demotivated and inefficient, creating administrative and security lapses, jail break in the Correctional Institution yards, due to fear of COVID-19.
- iii. Some inmates may contemplate jailbreak because of the level of congestion and fear of being attacked with COVID-19.

All these and more can happen in any developing country and so relevant authorities ought to be properly guided.

CONCLUSION AND RECOMMENDATIONS

Given the issue of delay in Criminal Justice System with adverse consequences for inmates Awaiting Trial; given the twin problem of congestion and poor welfare services in most correctional centers in developing countries, a salient conclusion to be drawn is that the essence of law should not be to punish offenders but to ensure that no one grows up a criminal. This is a novel challenge for scholars of Jurisprudence as well as those of Criminology in developing countries. COVID-19 discourse should be extended to all correctional institutions' facilities. Given the foregoing, the following suggestions are being put forward:

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- i. With the aforementioned variables, there is the urgent need in Nigeria to develop socially constructive alternatives to custodial sentences (such as Restorative Justice and other Alternative Dispute Resolution Mechanisms) especially for minor and first offenders.
- ii. The thrust of Nigerian Penal Policies should focus on how the inmates can be reformed and rehabilitated which will be beneficial to the society who will eventually be the end product users of the inmates when they are released from custody.
- iii. The circumstances whereby it has been alleged that some Correctional Institution Officers openly torture inmates in some Correctional Institutions should be challenged as such behaviour could trigger anger and violence in Correctional Institution.
- iv. Similarly, the situation whereby food contractors undersupply food stuffs, or in some cases supply adulterated and rotten foods to prisoners aimed at maximizing profit should be challenged by relevant agencies. Correctional Institution officers who collude with food contractors to under supply foods, or bring in rotten and adulterated foods for inmates should know that they are indirectly jeopardizing their lives and career in the event of Correctional Institution Jailbreak. To this end, Correctional Institution authority should ensure that adequate and correct measures of foods are provided to inmates at all times.
- v. On the role of the Criminal Justice System in effective management of cases of Awaiting Trial inmates, the Correctional Institution authority should be given adequate funding to enable it expands the existing Correctional Institution infrastructures which are mainly inheritance of the colonial jurisprudence. Expansion of Correctional Institution infrastructures is important because according to 'Frustration-Aggression Theory' and 'the Heat Theory' people who are frustrated (like Correctional Institution inmates) and are subjected to heat (like inmates in congested cells in Nigeria), are likely to react to these situations violently due to stress.
- vi. Moreover, the police and the judiciary on their own parts should avoid indiscriminate arrests and detentions of innocent citizens, minor and first offenders on the guise of doing justice.
- vii. Finally, it is important to note that Correctional Institution jailbreak cannot be completely eradicated in the management and administration of Correctional Institutions. So in all cases it is better to prevent; and all necessary steps are taken to attend to issues and problems that can lead to jailbreak without delay; as prevention is better than cure.

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Effect of Firm Attributes on Stock Returns of Quoted Consumer Goods Companies in Nigeria

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Abstract

This study examines the Effect of Firm Attributes on Stock Returns of Quoted Consumer Goods Companies in Nigeria. The study adopted the descriptive and ex-post facto research method and positivist research philosophy to address the research problem. Findings from the study reveals that firm size has a positive insignificant statistical influence on stock returns of the listed consumer goods sector suggesting that the size of a firm contributes positively towards the level of stock returns. Based on the result, such contribution is insignificant in determining or predicting the level of stock returns of consumer goods companies in Nigeria. This finding implies that the size of the company does not necessarily; influence the level of stock returns. This assertion can hold because according to CAPM, small companies will get higher returns. Investments in these companies can be considered to be at the highest level of risks and are deserved to earn higher returns. The study therefore recommends that Securities and Exchange Commission (SEC) subject the recorded earnings of the consumer sector to stress quality checks regularly to protect investors and prospective investors from potential rip-offs.

Keywords: Firm attribute, Stock returns Quoted consumer companies, Nigeria

INTRODUCTION

Although much of the world's attention is focused on COVID-19's immediate and direct impact, its indirect consequences, such as the state of the economy, may have long-term professional liability implications. Companies raise funds from the money and stock markets to meet their operational needs. The organization will raise funds by selling stock and bonds on the capital market. For investors, the stock market is a place to put their money in the hope of making a profit. According to Gitman (2015), investing in the form of shares would have incentives in the form of dividends and capital gains. Information applicable to capital market conditions is something that capital market participants would search for to make investment decisions. The company's policy on return distribution is one of the pieces of information needed in the capital market. The announcement of investor returns includes details on potential business earnings. For management, the payment of investment returns can be seen as an optimistic indicator to the market about the company's future, while for investors; stock returns are a perfect way to see how much uncertainty and what return rates can be predicted over time (Ali, 2017). Stock market returns are the profits or gains that investors make from investing in the stock market. Trading in the secondary market is the most popular way to generate stock market returns. An investor can gain a stock market return by purchasing a stock at a lower price and selling it at a higher price in the secondary market. As a result, stock returns from equity investments can fluctuate due to changes in stock prices, which are the result of a variety of factors, the effects of which can be positive or negative. These factors may be internal/firm-specific or external/macro. Firm characteristics and a variety of other considerations are examples of internal factors. Interest rates, world oil prices, international reserves, inflation rate, money supply, gross domestic product, and export production are examples of external influences. Internal variables can be managed, changed, and perfected by the organization, and as a result, it is likely to provide benefits to stakeholders (Kazeem, 2015).

This study, therefore, provides a measurement of stock returns variation that is caused by firm attributes. For instance, firm attributes such as size, leverage, and profitability can be used to predict the variations in stock returns. Firm size is one of the first empirically documented firm characteristics associated with realized stock returns (Banz 1981). Given that Nigeria as a developing market has diverse structure and institutional features from developed stock markets, and because investors are interested in getting more insights into the activities of consumer goods companies in the country because of the indispensability of their products in the Nigerian market it is imperative to find out whether stock returns in Nigeria respond differently to effects of firm-level attributes. This study, therefore, examines the determinants of stock returns of quoted consumer goods companies in Nigeria. The need to ensure a steady return on stocks for publicly traded companies cannot be overemphasized. Over the past few years, there are increasing researches surrounding the issues related to the determinants of stock returns. Limited empirical studies analyzed this issue. Existing empirical evidence is based mainly on data from developed countries. For example, Kim and Sorensen (1986), Bhandari (1988), Friend and Lang (1988), Titman and Wessels (1988), Lucas and Mc Donald (1990), La Porta, Lopez-de-Silanes, Shleifer and Vishny (2000), HovaKimian et al (2001), Baker and Wurgler (2002), Welch (2004), Dimitrov and John (2008), Korteweg (2009) focus on united states and Japanese manufacturing corporations without serious empirical review in developing economies. Thus, there is a conspicuous gap in the empirical research on stock returns of corporate firms, especially in Nigeria. Researchers in Nigeria are interested in firm-level attributes and their effect on stock returns. Many scholars have attempted to investigate the factors that influence the stock returns of publicly traded companies (Amadi & Odubo, 2002; Osamwonyi, 2003; Uwabanmwun & Obayagbona, 2012; Umar & Musa, 2013; Olowoniye & Ojenike, 2013; and Kazeem, 2015). Despite their strategic importance to the Nigerian economy, the studies centered primarily on the financial sector, excluding the manufacturing sector and, in particular, consumer goods companies. This study analyzed all consumer goods companies listed on the Nigerian stock exchange from 2010 to 2019. It will also shed light on the determinants of stock return of Nigerian consumer goods companies. Given the foregoing, the hypothesis underlying this study is stated thus;

HO₁: Firm attributes have no significant effect on stock returns of quoted consumer goods companies in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Firm Attributes

Companies can be differentiated from each other based on certain characteristics they possess. Such characteristics are referred to as firm attributes – which exist at the firm's level and have the potential to influence the decisions of the managers in the firm. Shehu and Farouk (2014) defined firm attributes as variables at the firm level that affect the decision of the firm both internally and externally over time. Such variables include size, leverage, growth, value, profitability, capital structure, and others. Those attributes of the firm are usually unique to a specific company and they usually portray certain perceptions in the mind of the user of information regarding the performance and future of the firm. Some of the attributes are discussed hereunder include firm size, profitability, leverage, and liquidity.

Firm Size

Firm size is one of the first empirically documented firm characteristics associated with realized stock returns (Banz 1981; Reinganum 1981; Keim 1983). Fama and French (1992) consider the size effect the most prominent. Investors can see the level of the company's stock return through the size of the company, because the larger the size of the company, the greater the rate of stock return to investors. A large company indicates that the company has a lot of assets that can be used to provide a return to investors. This is consistent with the studies conducted by Ernayani and Robiyanto (2016) and Sudarsono and Sudiyatno (2016) that firm size affects stock return contradiction to the Capital Asset Pricing Model (CAPM). Furthermore, Small companies are riskier than big companies. For example, some types of risk associated with small businesses can be thought of difficult to approach financing sources, lower market share, or less reputable brand names. According to CAPM, small companies will get higher returns. Investments in these companies can be considered to be at the highest level of risks and are deserved to earn higher returns. However, there is an assumption that needs to be made in this study. The risk levels of firms also depend on the risks of the industry as well as the projects that the companies are undertaking. Hence, big companies can also bear the higher risk if they are in a risky industry. The assumption is that this study will neglect factors that make big companies riskier than smaller companies. With the assumption, CAPM can successfully support the hypothesis of small firms can bring higher profits where high risks investments should be compensated with higher returns.

Consequently, investigators such as Banz (1981) and (Fama and French, 1992) have also found a strong relationship between company size and returns. Smaller firms appear to generate higher returns than larger firms. Again, the interpretation of these results is controversial. The excess returns of small firms can be interpreted as inefficiency, but they also may represent compensation for bearing risk. Smaller companies may be far more sensitive to economic shocks than are larger firms. Firm size is one of the most acknowledged determinants of stock return. It is commonly measured by either the natural logarithm of assets or sales or employees. Larger firms are associated with having more diversification capabilities, the ability to exploit economies of scale and scope, and also being highly formalized in terms of procedures. Shaheen and Malik (2012) described firm size as the quantity and array of production capability and potential a firm possesses or the quantity and diversity of services a firm can concurrently make available to its clients. Firm size plays a significant and crucial role in explaining the kind of relationships the firm has within and outside its operating environment. Babalola (2013) argued that the larger a firm is, the more influence it has on its stakeholders, and so large firms tend to outperform small firms.

Profitability

The profitability of the firm is another dimension of the firm's characteristics focused on in this study. EPS (Earning per share) usually has a significant positive influence on market return as shown in many past types of research. This indicates that the higher the firm's EPS, the higher the market-adjusted return and abnormal return that can be resulted by the firm's stock because a higher EPS means higher profit obtained from every dollar price earned by the firm. Investors/shareholders consider current earnings, future earnings, and earnings stability are important, thus they focus their analysis on the firm's profitability. They concern about the financial condition which will affect the firm's ability to pay a dividend and avoid bankruptcy. Also, profitability, which is frequently used as a measure of financial performance, is one of the main objectives for the existence of many companies. Profit is an essential prerequisite for any company operating in today's increasingly competitive and globalized market. Also, profit does not only serve as a means of attraction to investors; it also improves the level of solvency, and thus, strengthens consumers' confidence (Ismail, 2013). The concept of profitability is fundamental to both accounting and economic theories. Since it is an offshoot of income, it also has its foundation from the famous Hicks' concept of income. Using the Hicksian approach, profit can be explained as the maximum value which can be consumed at a given period without tempering with "well-offness"

(Glaulier, Underdown& Morris, 2011). This definition has been staunchly supported by economists. It provides a sound basis for appreciation of what actually constitutes income and hence, profit.

Again, profitability refers to the difference between the profit amount obtained from the assets and the expense of the liabilities. In the literature, profitability is stated as a function of both micro and macro determinants. Micro variables consist of the accounts in the balance sheet and income statement. Therefore, they are also named bank-specific variables. On the other hand, macro variables are not related to the internal process of the banks, but they affect profitability in a significant way. Size, capital, risk management, expense management, marketable securities, etc are generally considered micro variables (Gungor, 2007). Profit can also be conceived as the residual arising from netting revenue realized against the cost consumed (Igben, 2009). Again, this definition suffers general acceptance as economists do not subscribe to what they call arbitrary allocation of cost to realized revenues as accountants do. The implication of this is that profitability can be explained in various ways.

The concept, profitability, depicts the financial success of a venture. It is used to refer to the ability of an entity to make a profit. Profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities. According to the Institute of Chartered Accountants of Nigeria (ICAN) (2014), profit refers to the total income earned by the enterprise during the specified period, while profitability refers to the operating efficiency of the enterprise. An enterprise can make a profit on sales. This also implies the ability of an enterprise to get sufficient return on capital and employees used in business operation. To the financial manager, profit is the test of efficiency and measure of control (Oko, Ugwunta&Agu, 2013). To the owners, it is a measure of the worth of their investment; to the creditors, it is used as the margin of safety; to the government, it is a measure of taxable capacity and a basis of legislation; and to the country, profit is an index of economic progress, national income generated and the rise in the standard of living (Oko, Ugwunta&Agu, 2013).

Firm Age

The length of time of existence of the company is the age of a company. According to Ofuan and Izien (2016), the time interval during which a being or thing has existed is the age. Shumway (2001) revealed that some are of believing that listing age, should define the age of the company, however, he is of the view that a firm's age should be defined as the number of years of incorporation of the company. Shumway (2001) argues that listing is a defining moment in a company's life, hence, age listing has become more economical. His argument is set straight from the viewpoint of the company as a legal personality. This is based on the belief that as a legal person, a company is born through incorporation (Gitzmann, 2008, Pickering, 2011). Again, firm age is widely added as a determinant of stock returns (e.g. Custódio& Metzger, 2014; Lin & Chang, 2011). Firm age is an important factor in determining stock returns. This is because as firms grow older, they are characterized by a lower rate of failure and low costs to obtain capital (Koh, Durand, Dai & Chang, 2015), and they have the experience to negotiate favorable debt capital to increase returns. The reverse is true for young firms in the birth stage (Stepanyan, 2012). The fact is as listed firms become older and closer to the maturity stage in their firm life cycle, they acquire more business experience to make effective capital structure decisions and do utilize debt to increase returns. Firm age plays an important role in the firm's decisions to seek debt capital. Specifically, most older companies use more debt in their capital structure to take advantage of the benefits of an interest tax shield to maximize shareholders' returns.

Also, the life-cycle model of the firm can explain the relationship between firm age and shareholders' returns. Firms closer to maturity have substantial experience (Stepanyan, 2012) and make effective capital structure decisions by maximizing the benefits of a debt interest tax shield emphasized in Modigliani and Miller's (1963) theory. As firms move from the birth to the growth stage or closer to maturity, they face

lower costs of debt (Koh et al., 2015) and can increase debt to take advantage of an interest tax shield benefits to increase shareholders' returns. Returns increase because firms can deduct interest on debt before taxes are paid (Bhandari, 1988; Modigliani & Miller, 1963); fewer taxes mean more shareholders' returns. We assume that as firms grow older, they seek external finance via debt. In line with this reasoning, Custódio and Metzger (2014) link firm age to stock returns. More specifically, they use firm age as a proxy for firm life cycle, and their results confirm a direct and positive relationship between firm age and return measures.

Empirical Review

Chabachib, Hersugondo, Ardiana, and Pamungkas (2020) analyzed the factors that influence company value (PBV) in consumer goods companies listed on the Indonesia Stock Exchange in 2014-2018. The independent variables used in the study are capital structure (DER), company size (SIZE), liquidity (CR) with profitability (ROE) as an intervening variable. The population used in this study is all companies engaged in the consumer goods sector listed on the Indonesia Stock Exchange in 2014-2018. Sampling in this study used purposive sampling which resulted in a sample of 128 consumer goods sector companies. The method used is path analysis which is the development of multiple regression and bivariate analysis. The results of this study indicated that company size and liquidity have a positive and significant effect on profitability, the capital structure has a negative and not significant effect on profitability. Profitability and company size has a positive and significant effect on firm value. Capital structure and liquidity have a positive and not significant effect on firm value. Then profitability can mediate the influence of company size and liquidity on firm value, but profitability is not able to mediate the influence of capital structure on firm value. This study was done in Indonesia, the current study in Nigeria is needed due to the problem of external validity as an outcome of the formal study will ineffectual for decision making in Nigeria. Ahmed (2019) examined the impact of changing firm characteristics on dividend payout ratios of listed publicly traded North American companies. This study builds upon these and extends the research to publicly traded, North American firms in the past 30-year time period (1989-2019). The key question that this research paper aims to answer is which if any, firm characteristics have any causal relationship with the dividend payout ratio of the firm. This study also looks at the appearing and the disappearing phenomenon of cash dividends in the past 30 years and aims to reconcile the changing characteristics of the firms to this phenomenon. This is done by creating sub-periods within the dataset and observing the changing characteristics of the firms and the possible impact on the dividend payout ratios of the firms. It was found that size and liquidity produce statistically significant results in terms of having some relationship with the dividend payout ratios of the firms. After performing the Granger-Causality test, it was determined that only liquidity of the firm has some causal relationship with the dividend payout ratio of a firm. This study was done in North America why this current study was carried out in Nigeria to solve the problem of external validity.

Akwe, Garba, and Dang (2018) examined the effects of firm-level attributes on stock returns of the top twenty-five most capitalized quoted equity firms in Nigeria. Specifically, the study investigated the effects of firm size, the ratio of market to book value per share, and price to earnings ratio on stock returns of selected quoted firms in Nigeria from 2007 – 2016. The population comprised the top twenty-five most capitalized quoted equity firms, out of which twenty-one companies represent the sample of the study. The study adopted an ex-post-facto research design. The study used secondary data obtained from the audited accounts of the sampled firms, the Central Bank of Nigeria Statistical Bulletin, and the Nigerian Stock Exchange database and website. Analysis of data was carried out using panel data regression. The panel regression results indicate an insignificant negative effect between firm size and stock returns in Nigeria. The study used selected equity firms in Nigeria while the current study used consumer goods companies which make for the many differences. Oduma and Odum (2017) investigated the influence of leverage on dividend payout of selected manufacturing companies in Nigeria. The study used a sample of 50 quoted companies that have a dividend history and consistently published their

audited annual financial report from 2011 to 2015. A pooled regression analysis was adopted in the study. The result revealed that long-term leverage has a significant positive effect on a firm's dividend policy. The study went further to reveal that the interaction of age and profitability was significant in influencing dividend payout within the period under study. The study used only leverage as a firm characteristic why this current study used two others (firm size and firm age) to investigate their effects on stock returns.

Matemilola, Bany-Ariffin, Nassir, and Azman-Saini (2017) investigated the moderating effects of firm age on the relationship between debt and stock returns. The system generalized method of moment's results indicates that firm age has a positive moderating effect on the relationship between book debt and stock returns. The results are robust, as firm age positively moderates the relationship between market debt and stock returns. Moreover, firm age has a direct positive effect on stock returns. Results suggest that as firms grow older, they use their experience to make effective capital structure decisions (i.e., optimal debt-equity mix) to maximize debt interest-tax-shield and increase shareholders' returns. This current study used multiple regression techniques to analyze the data for the study which is the different methodological approach. Ltaifa and Khoufi (2016) investigated empirically the determinants of stock market returns of Banks in the MENA countries between 2004 and 2014. The study uses the three-factor model of Fama and French (1993) and the capital asset pricing model (CAPM) to analyze the relationship. The findings reveal that firm size, a book market value, and stock returns have a positive relationship. That is, companies with a high book to market value ratio earn superior returns. The study of Ltaifa and Khoufi (2016) suffers from some limitations. One, the study did not clearly state the technique for data analysis. Two, the study should have included more internal variables to determine their behavior on stock returns. Investors would want to know this as it will help in their investment.

Sani (2016) examined the effect of firm-specific characteristics on the dividend payout ratio of quoted conglomerates in Nigeria for a period of eight (8) years ranging from 2004-2011. The population of this study comprised the eight (8) conglomerate firms quoted on the Nigerian Stock Exchange as of 31 December 2011. Correlational research design and ex-post factor research design were adopted. Multiple regression techniques were employed as a tool for analysis in examining the impact of firm-specific characteristics on a dividend payout ratio of Nigerian quoted conglomerates and the study relied on the OLS regression result. The findings revealed a positive and significant impact of firm size, profitability, and liquidity did not affect dividend payout ratio while leverage had a negative and significant effect on dividend payout ratio. The study concluded that four of the explanatory variables of this study (that is; firm size, profitability, leverage, and institutional ownership) impact the quantum of dividend paid by Nigerian quoted conglomerates firms. The study collected data for 2014 while this current study used data from 2019 which captured recent issues such as the new code of corporate governance. Nguyen and Nguyen (2016) examined the relationship between firm sizes and stock returns of the service sector in ho chi Minh city stock exchange. The paper aims at investigating the existence of the size effect in the Vietnamese financial market. Particularly, the relationship between firm size and stock returns was explored. The stock return was calculated by dividing the sum of stock price and dividend payment by previous stock price to achieve a stock return in percentage while the firm size was measure using the log of total assets Having 160 observations of the companies in the service sector from 2009 to 2014, the correlational research design was adopted and the multiple regression model was employed to test that effect. The result revealed a significantly negative relationship between firm size and stock returns. This study focused on the firm size as an explanatory variable while this current study employed both firm characteristics and corporate governance variables.

Handoko (2016) determined the effect of variables dominant characteristics of the company, namely the size of the company, growth opportunities, profitability, liquidity, and tangibility to capital structure and to determine the effect on the capital structure of a company's value as well as to determine the trade-off theory or pecking order theory can be more precise in predicting changes in the different leverage between public insurance companies listed on the Indonesia Stock Exchange. This research used a sample

of 10 insurance companies (non-life insurance) during the years 2008-2013. The analytical method used is the panel data analysis method that uses a combination of data time series and cross-section with technical applications panel random effect model and fixed effect models and data used are secondary data. This research indicated that the dominant variable characteristics that affect the company's capital structure are firm size and growth, while the positive effect on the liquidity variable negative effect. Further positive effect on the capital structure of the company and the value of the trade-off theory can explain and more appropriate for the case of a public insurance company listed on the Indonesian stock exchange. This study was done in Indonesia and insurance companies while this current study is in Nigeria and on consumer goods firms. Hasan, Alam, and Rahaman (2015) analyzed the effects of size and value on the cross-section of expected returns in the Dhaka Stock Exchange (DSE). The study deploys the Fama and French (1993) three-factor methodology in conjunction with the Ordinary Least Square (OLS) model. The study period is divided into three periods; the pre-boom (2004 – 2008), boom period (2009 – 2010), and post-crash period (2011 –2013). The result of the study reveals that book to market equity ratio and stock returns have a positive effect in Bangladesh. The use of Ordinary Least Square Regression (OLS) does not seem to explain the individual or cross-sectional effect of the sampled firms given their respective peculiarities. Panel data stand to tackle a more set of problems and address more sophisticated issues than either pure time series or pure cross-sectional data alone would address. Thus, the use of panel regression is capable of given more robust results that can be acceptable than OLS.

Bala and Idris (2015) examined firms' specific characteristics of firm size, debt-equity, and earnings per share and stock market returns in Nigeria. The study samples nine (9) out of the twenty-one (21) quoted food and beverages firms in Nigeria from 2007 to 2013 using multiple regression models. The findings show that firm size has a significant and negative effect on stock returns of quoted food and beverages firms in Nigeria. The effect of earnings per share and debt-to-equity is found to be statistically significant and positive. The study did not factor in dividends in the measurement of the dependent variable (stock market returns). Stock return is the combination of dividend yield and capital appreciation. Also, the results of nine (9) out of over 170 sampled quoted firms cannot be representative of the entire market. More firms would have explained the effect better. The study should have also included other internal non-financial variables that have been examined and found to explain stock returns in other jurisdictions. Uwubanmwun and Obayagbona (2012) investigated the influence of firm attributes and equity returns in the stock market of Nigeria. The study uses eight sample firms with 11 years' observation. The proxies employ the firm's unique attributes to include: leverage, book/market value of equity, the ratio of price/earnings, and firm size. The study establishes that the size of the firm and returns of common stocks have no statistically significant relationship or effect. The study uses a total asset natural log which is the traditional measure of firm size. This is against previous studies' use of firm size or market capitalization as the best and appropriate representative for examining the effect of the size of the firm on returns of common stocks.

Olowoniyi and Ojenike (2012) aimed at identifying the factors that influence stock returns as a major concern for practice and academic research. This paper investigates the determinants of stock returns of listed firms in Nigeria. Panel econometric approach was used to analyze panel data obtained from 70 listed for the period 2000-2009. The fixed effect (FE), random effect (RE), and Hausman-test based on the difference between fixed and random effects estimators were conducted. Our findings suggest that expected growth and size positively influenced stock return while tangibility negatively impacted the stock return of listed firms. This study was done in 2012 and given the changes in governance, economic fluctuations, and other regulatory requirements, this study cannot be used to make informed business decisions. Mutiso (2011) analyzed the relationship between the dividend payout ratio, firm size, and the shareholders' dispersion using a sample of firms that are listed at the Nairobi Stock exchange (NSE) for the period 2005 to 2010. The study uses a sample of 31 firms out of the total 55 firms listed at the NSE by December 2010. The sampled firms consistently paid dividends to the shareholders throughout the study. The study also tested whether the DPOR of the firms listed at the NSE supports various existing dividend

payout policy theories. Secondary data was obtained from the NSE secretariat, internet, and company financial statements. The data was analyzed appropriately and the shareholders' dispersion was calculated by dividing the number of shareholders by the total shares for each company. The average DPOR was calculated, as well as the natural log of the average market capitalization for each firm. Parametric analysis was done and regression was performed on the various variables and the findings analyzed using descriptive statistics and regression. The result of the study showed that firm size and the shareholder's dispersion do not have a significant influence on the DPOR.

Theoretical Discussions

Agency Theory

The separation between owners and managers creates an agency relationship. An agency relationship exists when one or more persons (the principal or principals) hire another person or persons (the agent or agents) as decision-making specialists to perform a service (Ireland, Hoskisson & Hitt, 2011). Top managers have hired hands who may very likely be more interested in their welfare than that of the shareholders (Berle & Means, 1932). An agency problem arises where management emphasizes such policies that increase the size of the firm or that diversify the firm into unrelated businesses to the detriment of the shareholders that result in a reduction of dividends and stock price. Agency theory is related to examining and deciding two problems that are prominent in the relationship between principals and (shareholders) and their agents (board of directors): The agency problem that arises when the desires or objectives of the owners and the agents conflict or it is difficult or expensive for the owners to verify what the agent is doing. The executives may be more interested in increasing their salary than raising stock dividends (Olowookere, 2013). Monitoring the functioning of boards, or the 'control' role (Boyd, 1990; Johnson, Daily, & Ellstrand, 1996), is an important focus of corporate governance research (Hillman & Dalziel, 2003). The primary theoretical framework that relates this monitoring function to firm performance is derived from agency theory, which predicts that conflicts of interest can arise from the separation of ownership and control in organizations (Berle & Means, 1932; Fama & Jensen, 1983). From this perspective, the primary function of boards is to monitor the actions of managers (agents) to protect the interests of shareholders (principals) (Mizruchi, 1983; Eisenhardt, 1989; Andreasson, 2011). Should management pursue their interests at the expense of the shareholders' interests (Nicholson & Kiel, 2007), agency costs typically arise (Berle & Means, 1932). Monitoring by boards of directors may therefore reduce the agency costs inherent in the separation of ownership and control and, in this way, improve firm performance (Fama, 1980; Zahra & Pearce, 1989). Agency theory also predicts that the incentives available to directors and boards vary and are therefore an important precursor to effective monitoring (Kyereboah-Coleman & Biekpe, 2005), and that firm performance will therefore improve if these are aligned with the interests of shareholders (Jensen & Meckling, 1976; Fama, 1980).

The principal-agent problem arises when a principal compensates an agent for performing a certain act that is useful to the principal and costly to the agent, and where there are elements of the performance that are costly to observe. This is the case to some extent for all contracts that are written in a world of information asymmetry, uncertainty, and risk. Wheelen and Hunger (2010) think that, the probability that agency problems will occur increases when shares are owned by a large number of dispersed shareholders in which no single investor owns more than a small proportion of the entire issued shares. A similar problem will also arise when the corporate board is composed of persons who know less about the company or who are personal friends of top management, and when a larger percentage of members of the board are executive directors. The principal delegates decision-making responsibility to agents (Chowdhury, 2004). It is a concept that explains why behavior or decisions vary when exhibited by members of a group. Specifically, it describes the relationship between one party, called the principal that delegates work to another, called the agent. It explains their differences in behavior or decisions by noting the two parties often have different goals and, independent of their respective goals, different attitudes

toward risk. Invariably, the agents' decision choices are assumed to affect both parties. These relationships, according to Bromwich (1992) are perceived in economic and business life and also generate more problems of contracting between entities in the economy. Other related reviews include; The Sarbanes-Oxley Act of 2002 (SOX) which requires companies to report on the effectiveness of their internal controls over financial reporting as part of an overall effort to reduce fraud and restore integrity to the financial reporting process. Morris (2011) asserted that software vendors that market enterprise resource planning (ERP) systems have taken advantage of this new focus on internal controls by emphasizing that a key feature of ERP systems is the use of "built-in" controls that mirror a firm's infrastructure. They emphasize these features in their marketing literature, asserting that these systems will help firms improve the effectiveness of their internal controls as required by SOX. Internal control is one of many mechanisms used in business to address the agency problem. Others include financial reporting, budgeting, audit committees, and external audits (Jensen and Payne 2003). Studies have shown that internal control reduces agency costs (Abdel-khalik 1993; Barefield et al. 1993) with some even arguing that firms have an economic incentive to report on internal control, even without the requirements of SOX (Deumes and Knechel 2008). Their argument assumes that providing this additional information to the principal (shareholder) about the behaviour of the agent (management) reduces information asymmetry and lowers investor risk and, therefore, the cost of equity capital.

In the Executive Summary of "Enterprise Risk Management-Integrated Framework" 2004 by the Committee of Sponsoring Organizations (COSO, 2004) of the Treadway Commission, Internal controls have been incorporated into policies, rules, and regulations to help organizations achieve their established objectives. This is in line with Pany, Gupta, and Hayes' assertion that internal controls are meant to help an organization achieve its objectives. The COSO commission was partly instituted in response to a series of high-profile scandals and business failures where stakeholders (particularly Investors) suffered tremendous losses. This study however differs in that it is done for an institution that is not ailing though there are reported incidences of scandals and financial misfeasance. The results should therefore aid the preventive mechanism rather than being reactionary. Entities exist to provide value to their stakeholders but are normally face with uncertainty.

Stakeholder Theory

Stakeholder theory was propounded by Edward Freeman in 1984. Stakeholder theory is an extension of the agency view, which expects the board of directors to take care of the interests of shareholders. However, this narrow focus on shareholders has changed, and boards are now expected to take into account the interests of many different stakeholder groups, including interest groups linked to social, environmental, and ethical considerations (Freeman, 1984; Donaldson & Preston, 1995; Freeman, Andrew, Wicks, Bidhan& Parmar, 1991). This shift in the role of the boards has led to the development of stakeholder theory. Stakeholder theory views that "companies and society are interdependent and therefore the corporation serves a broader social purpose than its responsibilities to shareholders (Kiel & Nicholson, 2003). Mitchell, Agle, and Wood (1997) argued that stakeholders can be identified by the possession of one, two, or all three attributes: the power to influence the firm, the legitimacy of relationship with the firm, and the urgency of their claim on the firm. This typology allows managers to pay attention and respond to various stakeholder types. Stakeholder theory recognizes that many groups have connections with the firm and are affected by the firm's decision-making. Freeman et al. (2004) suggest that the idea of value creation and trade is intimately connected to the idea of creating value for shareholders; they observe, "business is about putting together a deal so that suppliers, customers, employees, communities, managers, and shareholders all win continuously over time." Donaldson and Preston (1995) refer to the myriad participants who seek multiple and sometimes diverging goals. Manager's view of the stakeholders' position in the firm influences managerial behavior.

However, Freeman et al. (2004) suggest that managers should try to create as much value for stakeholders as possible by resolving existing conflicts among them so that the stakeholders do not exit the deal. Carver and Oliver (2002) examine stakeholder views from non-financial outcomes. For example, while shareholders generally define value in financial terms, other stakeholders may seek benefits "such as the satisfaction of pioneering a particular breakthrough, supporting a particular kind of corporate behavior, or, where the owner is also the operator, working in a particular way. It means stakeholders have 'no equity stakes' which requires management to develop and maintain all stakeholder relationships, and not of just shareholders. However, Freeman et al. (2004) focus on two core questions: 'what is the purpose of the firm?' and 'what responsibility does management have to stakeholders? They posit that both these questions are interrelated and managers must develop relationships, inspire their stakeholders, and create communities where everyone strives to give their best to deliver the value the firm promises. Thus, the stakeholder theory is considered to better equip managers to articulate and foster the shared purpose of their firm.

Stewardship Theory

While Agency theory assumed that principals and agents have divergent interests and that agents are essentially self-serving and self-centered, Stewardship theory takes a diametrically opposite perspective. It suggests that the agents (directors and managers) are essentially trustworthy and good stewards of the resources entrusted to them, which makes monitoring redundant (Donaldson 1990; Donaldson & Davis, 1991; Donaldson & Davis, 1994; Davis, Schoorman & Donaldson, 1997). Donaldson and Davis (1991) observed that organizational role-holders are conceived as being motivated by a need to achieve, to gain intrinsic satisfaction through successfully performing inherently challenging work, to exercise responsibility and authority, and thereby to gain recognition from peers and bosses. The stewardship perspective views directors and managers as stewards of the firm. As stewards, directors are likely to maximize the shareholders' wealth. Davis et al. (1997) posited that stewards derive a greater utility from satisfying organizational goals than through self-serving behavior. They argued that the attainment of organizational success also satisfies the personal needs of the stewards. Stewardship theory suggests that managers should be given autonomy based on trust, which minimizes the cost of monitoring and controlling the behavior of the managers and directors. When managers have served a firm for a considerable period, there is a "merging of individual ego and the corporation (Donaldson & Davis, 1991

Davis et al. (1997) suggested that managers identify with the firm and it leads to a personalization of success or failure of the firm. Daily (2003) argued that managers and directors are also interested to protect their reputations as expert decision-makers. As a result, managers operate the firm in a manner that maximizes financial performance, including shareholder returns, as firm performance directly impacts perception about managers' performance. Fama (1980) suggested that managers who are effective as stewards of the firm are also effective in managing their careers. Supporting this view, (Shleifer and Vishny (1997) suggested that managers who bring good financial returns to investors, establish a good reputation that allows them to re-enter the financial markets for the future needs of the firm. From the stewardship theory perspective, superior performance of the firm was linked to having a majority of the inside (executive) directors on the board since these inside directors (managers) better understand the business, and are better placed to govern than outside directors, and can therefore make superior decisions (Donaldson, 1990, Donaldson & Davis, 1991). Stewardship theory argues that the effective control held by professional managers empowers them to maximize firm performance and corporate profits. Consequently, insider-dominated boards are favored for their depth of knowledge, access to current operating information, technical expertise, and commitment to the firm. Similarly, CEO duality (i.e., the same person holding the position of Chair and the chief executive) is viewed favorably as it leads to better firm performance due to clear and unified leadership (Donaldson & Davis, 1991; Davis, et al., 1997). Several studies supported the view that insider directors (managers), who possess a superior amount and quality of information, make superior decisions (Baysinger & Hoskisson, 1990; Baysinger, Kosnick &

Turk, 1991; Boyd 1994; Muth& Donaldson, 1998) compared the predictions of agency theory with that of stewardship theory and found support for stewardship theory is a good model of reality. Bhagat and Black (1999) have also found that firms with boards consisting of a greater number of outside directors (representing agency theory perspective) perform worse than firms with boards with a smaller number of outside directors. As such, some support exists for the stewardship perspective both conceptually e.g., Davis et al., (1997) and also empirically Bhagat and Black (1999).

METHODOLOGY

This study adopted the descriptive and ex-post facto research method and positivist research philosophy to address the research problem. An ex-post facto research design is commonly used in studies that investigate possible cause-and-effect relationships by observing a condition and searching back in time for plausible causal factors.

Table 1 Population of the Study

| S/N | Name | Year of Listing |
|-----|-----------------------------------|-----------------|
| 1 | Champion Brewery Plc | 1983 |
| 2* | Golden Guinea Brewery Plc | 1979 |
| 3 | Guinness Nigeria Plc | 1965 |
| 4* | International Brewery Plc | 1995 |
| 5* | DN Tyre& Rubber Plc | 2001 |
| 6 | Nigerian Breweries Plc | 1973 |
| 7 | Nigerian Enamelware Plc | 1979 |
| 8 | 7 Up Bottling Company Plc | 1986 |
| 9 | Vita Foam Nigeria Plc | 2007 |
| 10 | Dangote Sugar Refinery Plc | 2006 |
| 11 | Flour Mills Nigeria Plc | 1979 |
| 12 | Honeywell Flour Mill Plc | 2006 |
| 13 | P. Z. Cussons Nigeria Plc | 1974 |
| 14* | Multi – Trex Integrated Foods Plc | 2010 |
| 15 | Nascon Allied Industries Plc | 1992 |
| 16 | Northern Nigeria Flour Mills Plc | 1978 |
| 17 | Dangote Flour Mills Plc | 2008 |
| 18 | Union Dicon Salt Plc | 1993 |
| 19* | U.T.C. Nigeria Plc | 1972 |
| 20* | McNichols Plc | 2009 |
| 21* | Unilever Nigeria Plc | 1973 |
| 22 | Cadbury Nigeria Plc | 1979 |
| 23 | Nestle Nigeria Plc | 1976 |

Source: N.S.E. website, 2019.

Methods of Data Collection

The population of the study comprised all the twenty-three (23) listed consumer good firms on the Nigerian Stock Exchange as of 2019. The study used the purposive sampling technique to obtain a sample size of sixteen (16) and seven (7) with * were dropped among the firms listed in the consumer goods sector. This number is arrived at using the criteria that a company must have complete information for the number of years under consideration. The study employed secondary sources of data collected from the

annual reports of the sampled companies for a period of ten (10) years (2010 to 2019). These firms are public limited companies listed on the Nigerian Stock Exchange. By being public limited companies and as a requirement of being listed, an annual financial report has to be made available to the Nigerian Stock Exchange. Annual financial statements are a preferred choice for data collection based on the type of data to be collected, availability of data to be collected, ease of assessment ability and ease of results comparability with the aid of STATA version 13 as a tool for analysis. The data for the study is a panel in nature (that is cross-sectional time series data). To check for endogeneity, the study used the Hausman specification test, robustness tests, Multicollinearity using the Variance Inflation Factor (VIF), and the Brusch-Pagan test for heteroscedasticity, to check for the fitness of the model and reliability of findings.

Model Specification and Variable Measurement

The crux of the model is to study the determinants of stock returns of quoted consumer goods companies in Nigeria. The determinants used as predictors of stock returns include firm characteristics, ownership structure, and board attributes. Thus, statistical analysis for this study will be rooted in Arbitrage Pricing Theory (APT) which is on the basis that the stock returns are caused by a specific number of economic variables. The study examined the determinants of stock returns among consumer goods firms. The individual models are presented below:

Firm Characteristics and Stock Returns

$$SR_{it} = b_0 + \beta_1 FZ_{it} + \beta_2 FA_{it} + \beta_3 PROF_{it} + \varepsilon_{it} \dots \dots \dots (i)$$

Where: SR= Stock Returns, FZ= firm size, FA= age, PROF= profitability

Measurement of Variables

| S/N | Variables | Definitions | Type | Measurement | Construct Validity Source |
|-----|-----------|---------------|-------------|--|--|
| 1 | SR | Stock Returns | Dependent | represents the yearly All-Share Index (ASI) of consumer goods companies sampled. | Tripathi and Seth (2014), Ntshangase, Mingiri and Palesa (2016), Khalid and Khan (2017). |
| 2 | FZ | Firm Size | Independent | measured by Natural logarithm of number of outstanding common shares of the corporation at year end multiplied by price of each stock at same financial yearend. | Gallizo and Salvador (2006), Tripathi, (2009), Bala and Idris (2015). |
| 3. | FA | Age | Independent | measured by the natural log of total of firms. | Shafana, Fathima and Jariya (2013) |

| | | | | | |
|----------|--------------|----------------------|--------------------|---|------------------------------|
| 4 | Prof. | Profitability | Independent | Measured by average profit generated by firm over the study period. | Iqbal, Siddiq and Gul (2016) |
|----------|--------------|----------------------|--------------------|---|------------------------------|

Justification of Methods

The choice of an ex-post-facto strategy is that the case under study has already taken place. The analysis will use multiple regression techniques to calculate the influence of independent variables on the dependent variable. Stata Statistical Package has been used since it allows the determination of the influence of independent variables on the dependent variable.

RESULT AND DISCUSSION

Data Presentation

The chapter begins with the discussion of the descriptive statistics of the variables, and then the correlation matrix of the variables of the study. This is followed by the presentation, interpretation, and discussion of the regression results and test of hypotheses of the study. The chapter ends with a discussion of the major findings of the study. See appendix A.

Descriptive Statistics

This section contains the description of the properties of the variables ranging from the mean of each variable, minimum, maximum, and standard deviation. The summary of the descriptive statistics of the variables is presented in Table 4.1. The full result is contained in appendix B.

Descriptive Statistics

| Variables | Obs | Mean | Std Dev | Min | Max |
|------------------|------------|-------------|----------------|------------|------------|
| SR | 160 | 84.73062 | 264.197 | 17 | 1485 |
| FZ | 160 | 7.665493 | 2.200853 | 2.83181 | 14.8783 |
| FA | 160 | 28.3 | 14.39025 | 1 | 54 |
| PROF | 160 | .3020525 | .2332101 | -.223967 | .891987 |

Source: STATA OUTPUT, 2020.

The outcomes in Table 1 indicates that the measure of share return (SR), which is the inverse of the share price behaviour of consumer goods firms has an average value of 84.73062 and a corresponding standard deviation of 264.197, This implies that the deviation between companies within the period significantly differ. Also, the minimum and maximum values stood at 17 and 1485 respectively. The firms tend to record significantly high stock returns in some years than in others. The table also indicates that the sample firms have an average firm size of 7.665493 with a standard deviation of 2.200853. This means that the average value of firm size within the period of the study is 7.67 billion. The figure of the standard deviation means that there is a high level of variance in firm size among the companies. The minimum and the maximum as shown by the table are 2.83181 and 14.8783. This implies that the least amount of firm size is 2.83 billion and the largest is 14.88 billion.

The descriptive statistics in Table 4.1 shows that on average, the firm age of companies during the period of the study is 28.3 years, with an accompanying standard deviation of 14.39025. This shows that on average firms have been in existence for 28 years. The value of the standard deviation which is far from the mean shows that there is a lot of differences in age among the sampled firms. The value of firm age for minimum and maximum is 1 and 54 respectively. The descriptive statistics from Table 4.1 also indicate the mean of profitability is .3020525 which signifies that on average age 30% of the companies sampled made a profit within the period of the study. Meanwhile, the value of the standard deviation which is .2332101 (23%) close to the mean implying certain agreement with the claim that at least 30% of the companies registered profit at various periods in the ten years captured by this study. The profitability shows a minimum and maximum value of -.223967 and .891987 respectively. The minimum figure indicates 22% of the companies make losses while a maximum of 89% was making a profit.

Correlation Matrix

The Pearson correlation analysis matrix shows the relationship between the explanatory and the explained variables and also the relationship among all pairs of independent variables themselves. It is useful in discerning the degree or extent of the relationship among all independent variables as excessive correlation could lead to multicollinearity, which could consequently lead to misleading findings and conclusions. The correlation matrix does not lend itself to statistical inference but it is relevant in deducing the direction and extent of association between the variables. Table 4.2 presents the correlation matrix for all the variables.

Table 4.2 Correlation Matrix

| Variable | SR | FZ | FA | PROF |
|----------|--------|--------|---------|--------|
| SR | 1.0000 | | | |
| FZ | 0.1359 | 1.0000 | | |
| FA | 0.2490 | 0.5138 | 1.0000 | |
| PROF | 0.2344 | 0.3674 | -0.0230 | 1.0000 |

Source: STATA OUTPUT (2020)

Table 2 showed that the correlation between the dependent variable, SR, and the independent variables, FZ, FA, PROF on one hand, and among the independent variables themselves on the other

hand. Generally, a high correlation is expected between dependent and independent variables while a low correlation is expected among independent variables. According to Gujarati (2004), a correlation coefficient between two independent variables 0.80 is considered excessive, and thus certain measures are required to correct that anomaly in the data. From Table 4.2, it can be seen that all the correlation coefficients among the independent variables are below 0.80. This points to the absence of possible

Multicollinearity, though the variance inflation factor (VIF) and tolerance value (TV) test are still required to confirm the assumption. The table reveals a positive correlation between the dependent variable stock returns and the explanatory variables of firm size, firm age, and profitability with coefficients of 0.1359, 0.2490, and 0.2344 respectively. This implies that the three explanatory variables move in the same direction with stock returns.

Robustness Test

Test for Multicollinearity

The non-existence of Multicollinearity is a key assumption of linear regression analysis. Multicollinearity occurs when the explanatory variables are not independent of each other. Multicollinearity is examined using tolerance and variance inflation factor (VIF) values. The result of the Multicollinearity test is shown in the table below.

Table 3: Tolerance and VIF Values

| Variable | VIF | 1/VIF |
|----------|------|----------|
| FZ | 1.89 | 0.529101 |
| FA | 2.03 | 0.492611 |
| PROF | 1.31 | 0.763359 |

Source: STATA Output, 2020.

Based on the evidence presented in Table 4.3, it can be concluded that there is no Multicollinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 0.10 (rule of thumb).

Test for Heteroscedasticity

This test was conducted to check whether the variability of error terms is constant or not. The presence of heteroskedasticity signifies that the variation of the residuals or term error is not constant which would affect inferences in respect of beta coefficient, coefficient of determination (R²), and F-statistic of the study. Heteroscedasticity was tested using Breusch Pagan's Test. The results are presented in the table below;

Table 4.4 Test for Heteroscedasticity

| Variable | Chi2 | Prob>Chi2 |
|-----------------|-------|-----------|
| Firm Attributes | 0.331 | 0.6410 |

Source: STATA OUTPUT, 2020

Table 4.4 shows the results of heteroscedasticity for the aggregated variables of the study. The goodness of fit test which is a statistical hypothesis test to show how sample data fit a distribution from a population with a normal distribution shows a Pearson chi2 value of 0.6410 and a corresponding

probability of 0.331. This indicated that the adjustment of the observations problems is well and no errors exist underlining the general fitness of the model.

Hausman Specification Test

In panel data analysis (the analysis of data over time), the Hausman Test can help to choose which between a fixed-effects model or a random-effects model is appropriate for interpretation. The null hypothesis is that the preferred model is random effects; The alternate hypothesis is that the model has fixed effects. Essentially, the tests look to see if there is a correlation between the unique errors and the regressors in the model. The null hypothesis is that there is no correlation between the two. Therefore, because of the homogeneity of data used in this study, which assumes that fixed effects and random effects models are similar, the result for the Hausman Specification Test for the study is presented in the table below:

Table 5 Hausman Specification Test

| Variable | Chi2 | Prob>Chi2 |
|-----------------|------|-----------|
| Firm Attributes | 0.76 | 0.8590 |

Source: STATA OUTPUT, 2020

The Hausman Speciation Test is conducted to choose between the fixed and random effect models. The result of the Hausman Test revealed that the value of chi2 is 0.76, 0.01, and 1.24 for firm attributes, ownership attributes, and board attributes respectively. The insignificant value as reported by the probability of chi2 indicates that the Hausman Test is in favour of the random effect model. Furthermore, to meet the condition that one or more equations have to be satisfied exactly by the chosen values of the variables, the Breusch and Pagan Lagrangian Multiplier Test for random effect was conducted to choose between the random effect result and pooled OLS regression which is more appropriate. The result revealed that the prob>chi2 for all variables indicates 0.0000. From this result, the best model to be interpreted is the pooled OLS regression model since the prob>chi2 is less than 0.05 for all variables.

Data Analysis and Results

Three regression models were stated in methodology with the aim of achieving the specific objectives of the study. The first model examined the effect of firm attributes (firm size, age, and profitability) on stock returns. The results of the Models using pooled OLS regression as specified by the outcome of the Breusch and Pagan Lagrangian Multiplier Test for the random effect are presented below as well as the test of hypothesis.

Ho₁: Firm attributes have no significant effect on the stock returns of Quoted Consumer Goods Companies in Nigeria.

| SR | Coefficient | T | p-value |
|-------------------|-------------|------|---------|
| FZ | 19.19973 | 1.65 | 0.101 |
| FA | 2.940353 | 1.77 | 0.078 |
| PROF | 327.9157 | 3.47 | 0.001 |
| R-Square | 0.1295 | | |
| Adjusted R-Square | 0.1127 | | |
| F-Statistics | 7.73 | | |
| Prob > F | 0.0001 | | |

Table 6 Pooled OLS Regression Result

Source: STATA OUTPUT, 2020.

In regression analysis, the result of the R-square value shows the level at which the explanatory variables explain the dependent variable. Table 4.6 revealed that the R-square is 0.1295. This means that the firm attributes in the study explained stock returns to the tune of 13%. The value of F - statistic is 7.73 with a probability of $\chi^2 = 0.0001$. The probability of χ^2 is significant at 1%, indicating that the model is fit. This serves as substantial evidence to conclude that the firm attributes selected for the study are suitable and can be used to predict the behavior of the dependent variable. Based on the individual explanatory variables, Table 4.4 shows that firm size has an insignificant positive effect on the stock returns of sampled consumer goods firms in Nigeria, from the coefficient of 19.19973 with a t-value of 1.65 and a p-value of 0.101 which is statistically insignificant at 5% level of confidence. This result suggests that an increase in firm size will increase the level of stock returns of firms. However, looking at the p-value such an increase is considered insignificant. Hence, the study accepts the assertion that firm size has no significant effect on the stock returns of listed consumer goods firms in Nigeria.

The study also, examined whether age as a firm characteristic can determine the level of stock returns among quoted consumer goods companies in Nigeria. The result obtained from the pooled OLS regression indicates that age has a positive but insignificant effect on stock returns. This is evidenced by the value of coefficient and probability which are 2.9403 and 0.07 respectively. This implies that the age of firms has a positive contribution to stock returns. However, since the p-value is above the 5% level of significance, the study lacks evidence to conclude that age can significantly influence the stock returns of firms in the area covered by the study. From table 4.6, it can be seen that profitability can significantly, determine the stock returns of quoted consumer goods companies in Nigeria. This result is evidenced by the value of the coefficient which is 327.9157 and a p-value of 0.001 indicating a strong likelihood that profitability can be used to predict the level of stock returns in the consumer goods sector. Based on this the study rejects the hypothesis that profitability has no significant effect on stock returns of quoted consumer goods companies in Nigeria.

Discussion of Findings

Firm Attributes and Stock Returns

The objective of this research is to ascertain the effect of firm attributes (i.e firm size, firm age, and profitability) on stock returns of quoted consumer goods companies in Nigeria. The result of the study shows that firm size has a positive insignificant statistical influence on stock returns of the listed consumer goods sector suggesting that the size of a firm contributes positively towards the level of stock returns. Based on the result, such contribution is insignificant in determining or predicting the level of stock returns of consumer goods companies in Nigeria. This finding implies that the size of the company does not necessarily; influence the level of stock returns. This assertion can hold because according to CAPM, small companies will get higher returns. Investments in these companies can be considered to be at the highest level of risks and are deserved to earn higher returns. With the assumption, CAPM can successfully support the hypothesis that small firms can bring higher profits where high risks investments should be compensated with higher returns. However, larger firms are associated with having more diversification capabilities, the ability to exploit economies of scale and scope, and also being highly formalized in terms of procedures. This finding is in tandem with those of *Chabachib et al, (2020)*; Ahmed (2019); Akwe, Garba, and Dang (2018); Nguyen and Nguyen (2016). This finding supports the Arbitrage Pricing Theory (APT) which is a Capital Asset Pricing Model (CAPM), premised on the basis that the stock returns are caused by a specific number of economic variables.

Again, the study found that firm age has a positive but insignificant impact on stock returns among consumer goods companies in Nigeria. Here firm age is found to have a positive effect but not a significant increase in stock returns. This means that the age of the firm does not significantly determine the level or extent of stock returns to the shareholders. Although it has a positive contribution to stock

returns. Firm age is an important factor concerning stock returns. This is because as firms grow older, they are characterized by a lower rate of failure and low costs to obtain capital (Koh, Durand, Dai & Chang, 2015), and they have the experience favorable debt capital to increase returns although, the reverse is true for young firms in the birth stage (Stepanyan, 2012). The fact is as listed firms become older and closer to the maturity stage in their firm life cycle, they acquire more business experience to make effective capital structure decisions and do utilize debt to increase returns. Also, the life-cycle model of the firm can explain the relationship between firm age and shareholders' returns. Firms closer to maturity have substantial experience (Stepanyan, 2012) and make effective capital structure decisions by maximizing the benefits of a debt interest tax shield emphasized in Modigliani and Miller's (1963) theory. This finding is in with Oduma and Odum (2017); Matemilola et al, (2017).

Also, the Profitability of the firm is another dimension of the firm's characteristics focused in this study. The study finds that profitability has a positive significant effect on stock returns of quoted consumer goods companies in Nigeria. This outcome provides statistical evidence that profitability has a significant influence on stock returns. Consler and Lepak (2016) aver that more profitable firms are more likely to guarantee higher returns. EPS (Earning per share) usually has a positive influence on market return as shown in many past types of research. This indicates that the higher the firm's EPS, the higher the market-adjusted return and abnormal return that can be resulted by the firm's stock because a higher EPS means higher profit obtained from every naira price earned by the firm. Investors/shareholders consider current earnings, future earnings, and earnings stability are important, thus they focus their analysis on the firm's profitability. This finding aligns with the stakeholder theory which focused on how various stakeholders including investors can be satisfied given the performance of the company. This finding is consistent with that of Chabachib et al., (2020); Handoko (2016); Sani (2016).

CONCLUSION AND RECOMMENDATIONS

Stock returns from equity investments are subject to vary because changes in stock prices are a product of several factors and the impacts could either be positive or negative. Also, emerging markets such as Nigeria have different structures and institutional characteristics from developed stock markets, and because investors in these markets are interested in getting more insights into the activities of companies, it is imperative to find out whether stock returns in Nigeria respond differently to effects of firm-level attributes factors or not. Thus, the need to begin to look up for indicators that guarantee a rise in stock returns. Hence, this current study examined the determinants of stock returns of quoted consumer goods companies in Nigeria. Specifically, this study examined the effects of firm attributes on stock returns of consumer goods companies quoted on the Nigerian Stock Exchange from 2010-2019. Relevant theoretical and empirical literature was reviewed. The review shows that studies on stock returns are motivated by the fact that listed firms use returns to communicate their level of performance to the shareholders and the public at large. It also reveals that previous studies in this area of research were marred by inconsistent and inconclusive findings. The differences in findings could be attributed to methodological approaches regarding the measurement of the dependent and independent variables, the disparity in research domains, and differences in economic systems where these studies were conducted. The literature review also reveals a dearth of studies on the subject in the Nigerian context.

In line with the Arbitrage Pricing and Agency Theories that underpin the study, a multiple regression model was used to explain and predict empirically the changes in Stock Returns (share price) as a result of changes in firm attributes, ownership attributes, and board attributes. The three models used for the study examined the association between firm attributes (firm size, firm age, and profitability), Balanced panel data were extracted from the financial statements of 16quoted consumer goods firms in Nigeria for the period 2010-2019. The pooled OLS result reveals that profitability, board size and has no significant effect on stock returns of quoted consumer goods firms in Nigeria.

The impact of stock returns on firm operations has become a hot topic in accounting and finance literature. This study attempted to investigate the effects of corporate assets on the stock returns of publicly traded consumer goods companies in Nigeria. However, when the variables are viewed separately, the effect becomes diluted. The study finds that firm size, and firm age has no major impact on stock returns. Based on the study's lack of statistical data, it is impossible to conclude that these variables are determinants of stock returns of publicly traded consumer goods companies in Nigeria, also People are afraid of going to hospitals, and Market places. Centered on a variety of people/organizations concerned directly or indirectly with firm-level attributes and other corporate assets and stock return processes in Nigeria, the study makes the following recommendations:

- i. The study presented statistical and empirical evidence that profitability has a major impact on stock returns among Nigerian publicly traded consumer goods firms. As a result, it was proposed that the Securities and Exchange Commission (SEC) subject the recorded earnings of the consumer sector to stress quality checks regularly to protect investors and prospective investors from potential rip-offs.
- ii. According to the report, consumer goods companies should promote greater institutional shareholding. This is focused on the assumption that institutional ownership has an impact on stock returns because the higher the institutional ownership, the greater the company's external influence, which may allow managers to raise dividend payments.
- iii. Sick people should visit the hospital not to be scared of the Covid-19 test.
- iv. People need to be up and down also encouraged inter border business for the economy to bounce back
- v. All the commandments of Covid-19 should be respected.

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